

**A STUDY TO FIND OUT THE CONTRIBUTION OF  
DIFFERENT TYPES OF SCHOOLS TOWARDS  
VARIOUS VOCATIONAL COURSES IN INDIA WITH  
SPECIAL REFERENCE TO ENGINEERING, ARMY  
AND MEDICAL PROFESSIONS**

**THESIS**

**Submitted for the Degree of  
Doctor of Philosophy**

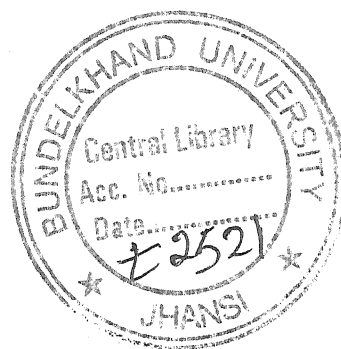
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CERTIFICATE

Certificate that the thesis Entitled, "A STUDY TO FINDOUT THE CONTRIBUTION OF DIFFERENT TYPES OF SCHOOLS TOWARDS VARIOUS VOCATIONAL COURSES IN INDIA WITH SPECIAL REFERENCE TO ENGINEERING, ARMY AND MEDICAL PROFESSIONS" submitted by Smt. Satvinder Dhillon for the award of Ph.D. degree in education of the Bundelkhand University, Jhansi, is the candidate's own work which has been carried on under my guidance and supervision. It is also certified that she had completed the attendance requirement.

  
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### DECLARATION

I Solemnly declare that this thesis entitled. "A STUDY TO FINDOUT THE CONTRIBUTION OF DIFFERENT TYPES OF SCHOOLS TOWARDS VARIOUS VOCATIONAL COURSES IN INDIA WITH SPECIAL REFERENCE TO ENGINEERING, ARMY AND MEDICAL PROFESSIONS" submitted by me for the award of Ph.D Degree in Education, of the Bundelkhand University, Jhansi, is my own work and has not been submitted earlier. However, If later on anything is found contrary to this Declaration, I shall be fully responsible for the consequences.



Mrs. S. Dhillon  
Investigator

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(Mrs. S.Dhillon)  
Investigator

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*CHAPTER - I*

*INTRODUCTION*

## CHAPTER-I

### INTRODUCTION

#### 1. ORIGIN OF THE STUDY:

The human life, as we all know, is considered to be the noblest and most virtuous of all lives, and human being the noblest of all creatures existing on the surface of earth.

This phenomenon has come about because man has in his possession that most complex of all creations of God- a highly developed brain. Today man is able to control many natural phenomenon and other living beings by virtue of the above mentioned possession of his. But it has been observed, since the time man has started traversing the face of earth, that this creature, or any other creature for that matter, can not live in isolation. He seeks society, is affected by it and also, moulds and influences it in turn. Man has also been taught by the powerful phenomenon of experience that to reap the benefits of society and become a worthy, contributing member of it, each individual requires deliberate guidance and elaborate instructions as to the proper conduct acceptable and desirable to the society and his place and role thereof. Untended, alone and left to its own resources, it has been seen that, most part of his personality develops negative traits or, what is popularly called the 'Animal nature'.

Education, deliberate and painstaking and of the proper

kind has been acknowledged as the universally accepted agency to bring out the best in man so that he can make his contribution in making this world a happier place, a process which we call 'progress', and making his own life a happier and more contented one.

An education properly given draws out the best in man which, otherwise, might lie hidden within him for ever, and opens upto him all the treasures that life has to offer. This is the reason it is universally accepted that every person should, by right or as compulsory factor, partake of the education including the knowledge of three R's, and all such information in various subjects which is considered essential for proper growth of the personality and future happiness of the person concerned.

This noble task, at present, is being performed by the agencies known as schools, some of which are owned by the Govt. while others are in private hands.

Education of the masses, and that too quality education is the cry of the day. Each country's Govt tries its utmost to provide more and more facilities, more and more opportunities and better qualified teachers to the Schools. But still it is seen that the Govt., effort, in a country like India which is lagging behind in material progress and has an immediate and pressing requirement of well-educated people to take it on the path of progress, is falling woefully short of the requirement. The latest campaign

started by the Govt. a few years ago, to make the whole population proficient in at least basic three R's is commendable, and will no doubt yield no mean results in the coming days, but the researcher has felt that at least for the future some policy will have to be devised and implemented so that no citizen has to go without education, specially at the school stage. Just the knowledge of three R's, even if we are able to achieve the target of 100% literacy, is not whole some. Each human being is important and so are his personality development and character formation.

India has had a glorious past as far as education is concerned, when education was given for the exaltation of one's personality, for attaining the highest virtues of character and for understanding one's duty in his surroundings. We are all aware of vedic education in India when students were taught to consider truth, honour and duty above their lives and humans were taught to behave in a manner expected and worthy of a human.

Though we still strive and aim to achieve the same goals; we still consider all that an ideal situation which we should try to achieve but in today's world the priorities of human beings have changed. Various kinds of progress has compelled man to find a slot for himself in the society, to earn money which is so important for his survival. Apart from earning money, the need to be respected by others is always present in a man. Maslow clearly states in his

hierarchy of needs that spiritual need is the uppermost in the pyramid, which a person seeks to satisfy only when his all other, more basic needs have been fulfilled and that is why today education is expected to enhance the character-formation but also, first, to help in earning a livelihood and give status in society.

Money of course is of paramount importance, but still an illiterate person, even with money, can not command the same respect as a learned man does, so the goal of value-based education has been set-up.

In a country where illiteracy hovers between 65-70% the above mentioned task is by no means easy, rather it is staggeringly difficult and also requires stupendous amount of economic resources.

Various researchers have spent a lot of time and effort for ascertaining the factors responsible for such a huge no. of illiterate people in the country and they have succeeded in pin-pointing a few causes which are the chief contributors in this situation. One of the most important ones is the prejudice against women's education. Since time immemorial education has been considered unnecessary for women not only in our country but in almost all parts of the world and with the sole purpose of education becoming the ability and means to earn money only, women's education suffered a further set-back. With modernisation women's education did get some support but it was in largely urban

areas and that too, to a limited extent only. Most of our villages still like to keep their women folk uneducated and illiterate. Other very important factor leading to illiteracy is the problem of wastage and stagnation. This phenomenon is visible in rural areas where most of the boys have to work on the farm land and other manual jobs after growing up and so the motivation to get education is very little. Another related factor, prevalent among the people of rural areas doing manual jobs, is that spending any amount of money on education is like wasting it as after getting educated all the boys start aspiring for white collar jobs and they do stop taking any interest in their family occupation, which ultimately suffers. So education is considered something which renders the boys useless.

Another factor that has come to light is that children, since very young, start helping in their parents' work or often work as child labourers and thus, are a source of monetary benefit to parents so parents are reluctant to spare them and send them to schools. If these children have to be sent to school their parents have to be compensated monetarily; education, atleast the primary education, has to be very cheap; parents have to be taught about the advantages of education, or atleast literacy, and last, but not the least, parents have to be persuaded to shed their prejudices and start educating the women-folk.

It is common knowledge that it is not the 'will to

perform' the above mentioned task, not with-standing its enormity, but the financial constraint, our country and thus the Govt. being a rather poor one, which comes in the way as the biggest obstacle. There is no dearth of intellectuals in the country and no dearth of practical ideas which can really transform the educational structure. There are various ways and methods which can be adopted to provide education to people in its real sense, all aspects of their personality can be developed and they can be offered jobs suiting to their temperament and abilities. But all this at present seems like an utopia only. Individual enthusiasts are discouraged to take any initiative seeing the enormity of the task and also the incalculable amount of finances involved. It requires a concerted effort on a very-very large scale, with the help of dedicated people which can be found, I am sure. The only thing which seems impossible to find is the finance. In a country like ours where it is a constant struggle for most people to just make both ends meet and where the govt. is perpetually trying to find ways to provide the populace with basic minimum requirements of life, expenditure on education sector finds a rather low priority in the govt. budget.

Since independence, money has been the single most important factor acting as a road-block in the path of progress of education or, for that matter, in the path of all kinds of progress in the country.

It will not be true if we claim that quality education



is not provided any where in the country. There are many Schools which can boast of the same and which are worthy of their name for the praise-worthy function they are performing. But they are too few in number to make any significant contribution.

If we take a bird's eye view of all the schools in the country we find that the disparity regarding educational facilities provided by them is as great and glaring as is evident in the living standards of the populace.

The schools which are considered really good and contributing to the exaltation of a child's personality seem economically out of reach of the common man and most of the ones which are within reach are lacking in basic requirements, some moderately but most of them acutely.

There are many schools in big, modern cities which provide the children with enormous amounts of co-curricular activities and games and sports facilities which may not be easily available in the society, at least Indian society, like the facility of a swimming pool to teach swimming, horse riding, going on long excursions to other countries, all modern equipments and proper play grounds for popular games, the use of audio-visual aids, even the services of counsellors to help the children in bettering their performance etc. all for a certain amount of money, making it the preserve of the affluent. On the other hand, in many of our villages and even some cities, the government-owned

schools are in such shabby state that they do not have even the basic essentials as - a proper building for the school; cheap books are not available, cheap because the population making use of such schools is not very affluent; even proper teachers are not there for each class. Many of the schools are just single room, single teacher schools with all the classes and all the subjects taught by the same poorly-paid teacher. And those having even this much can still consider themselves lucky as there are many schools lacking one of these two most basic elements also. This sorry state of affairs had prompted the govt. to start Operation Black-board with much fan-fare, to provide all the schools with at least the minimum requirements of a building, a teacher and normal class-room equipment like black-board, chalk, text-books etc. but the movement seems to have lost its direction and its drive in the ever present political drama in the country.

In a secular, federal state aspiring to tread the socialistic path, can such glaring disparity be justified? Does not it reflect the psyche that only the children of the affluent have a right to all-round development of personality?

It can be argued that sports like riding, swimming activities like trips to other countries etc. are not really required for properly educating a person and that the same result can be produced by providing students with physical

and mental exercises at a much lesser cost. This researcher had also conducted a small survey asking parents about their views on what they considered the essentials of a good school and results revealed that education-conscious people feel that a good school must have the following requisites-

- (1) Well qualified teachers.
- (2) Adequate furniture and airy rooms.
- (3) Co-curricular activities including N.C.C / Scouting.
- (4) Games/Sports Facilities and a big playground.
- (5) Teacher - pupil ratio between 1:35 - 1:50
- (6) Well stocked library and laboratory.
- (7) Medical - Aid.

On perusing through the above you will find that the facilities at present being provided in most of the municipal or govt. run schools are far short of the requirement.

And secondly, we find that schools having English as the medium of instruction are more popular and more sought after. But children who are not well conversant with the language have to struggle far more than others and it affects their academic performance though they are not lacking in competence at all.

One may argue that when govt is providing us with the alternative of govt schools then why should children not knowing English try to study in the English medium/public schools? Reasons are many. One Reason can be the somewhat

exalted position given to English language in our society. What ever is glamorous, fashionable and expensive has English language and western culture in its background. Even the people occupying high govt offices or working with private companies and getting quite high remuneration for the same, conduct their business in English. In fact English is considered essential in getting, and then holding, such positions. A person not knowing English is some what looked down upon, even by people who themselves do not know English.

How, one may wonder, has this situation come about? Why should a nation so rich in culture and tradition and having an advanced and scientifically sound language of its own put some other, foreign language on a higher pedestal?

If we look around our selves and scrutinize our history, we may find that atleast one reason can be the deep rooted impact made on the collective psyche of the people by our successive rulers that the rulers were almighty, always right, more knowledgeable and advanced. Therefore it was accepted, out of sheer necessity to stay alive at first, but later-on, so it seems, just as any tradition is accepted. Power is something that every individual aspires for. Power over others, power over the happenings around him, power to influence the course of events or to humble his fellow human beings has intoxicated man since time immemorial and continues to do so even today. To gain this power, people try to gain 'position' in society. As India remained under

foreign rule for many centuries, this could be done only by complying with the diktats of the foreign rulers, by thinking like them, acting like them, by imitating them in all spheres of life so as to convince the master of their unfailing loyalty.

During the time of muslim rule the country had an indigenous system of education spread all over the country. May be it is true that even at that time Sanskrit and Hindi were not given much encouragement and that the education system was far less advanced on the scientific and technological fronts, but at least people were saved from the ignominy and humiliation of being illiterates. All this changed with the advent of the English rulers. Our historical accounts bear testimony that indigenous literature was held in contempt by the new rulers, local languages were declared useless and indigenous system of education was declared 'good for nothing' and systematically wiped-out, thus pushing the population into the darkness of ignorance and illiteracy.

Later on, when the English rulers felt the need for educated people; educated in their language and culture, they started establishing their own schools, colleges and Universities. Students passing out from there were quickly absorbed into govt. jobs and acquired some status vis-a-vis the rulers. Thus started the mad rush for admission into such schools, which maintained a good standard no doubt, but

were too few in number to serve the whole population.

Though India is free now since a long time, the business of govt. is continuing largely on the lines set by the british only and the exalted position allotted to English language by them has so far not been challenged. Even today, a person not knowing English is not considered educated enough and all the vocations having 'prestige' still conduct their business largely in English and so, as a logical consequence, schools thought to be fulfilling this requirement have become more sought after. Here it is only logical to clarify that the situation may not be as it actually seems. The schools of today try to cater to the psychology of the people and they try to give education on the lines demanded or expected by the people, which may not be actually required.

This situation has given rise to the phenomenon of selective admission policy in the so called 'good schools'. It being the endeavour of every parent to provide their children with the best possible education, parents themselves undergo numerous hardships to spare the money required and also put their children under a lot of stress to do better and better in studies so as to secure a seat in these schools. The underlying idea being that their future success depends upon today's good schooling only. Though this fact can not be disputed, but in the researcher's opinion, what can be disputed is the notion which is growing and widely taking roots that more the money required to be

spent for sending the child to a particular school (almost always an English medium school) better is the academic credibility of the school.

Schools maintain their performance charts highlighting the pass percentages in board examinations, giving credibility to their claims that they are some sorts of magic machines guaranteeing the success of students. But what is actually at work is, as mentioned earlier, the selective admission policy pursued by these schools. Students seeking admission have to undergo a Written exam which is by no means easy, and often they have to face an interview also, to ascertain whether the child has the potential for success or not. Not only this, but parents are also not spared. Parents also have to undergo interviews and their educational qualifications are pried into! all this to ensure that parents are capable of teaching their children at home. Any child having even a slight weakness in studies is roundly rejected and the plea given is that 'The school can not take the chance of spoiling its result'. What, pray, is the role of the school then? If the student is capable of passing with his own efforts and parents are able, and willing, to provide all the help required at home, then why go to all the trouble and seek admission in such a school? Is it only for namesake? Is it only to impress others with the name of the school?

If we think with a cool mind, this really is the reason

in many cases. People are ready to pay extra money, in the form of 'donation' to the school, to gain admission in a school with a 'name', a 'reputation'!

This, indeed, is not the case always but it is present to an alarming extent. True, schools can really influence the personality of a child and groom him on the right lines, and parents hope their child to be transformed into a person capable of looking after himself, and capable of elevating his own as well as their position and status in the society.

Though nothing can be truer than the fact that schools have to spend a lot of money to provide each student with proper and all-round development including academics, games and sports, literary and cultural activities. This money may come from the Govt. or may come from the coffers of the parents, that is besides the point. The main point under our consideration should be where do we draw the line? Is it true that more the money required, and thus, of-course, more numerous the facilities and experiences provided to students, more will be their chances of leading a successful life in future, or we can draw a line at a few basic requirements, Which, if met, can help the child's mental and physical growth to the same extent?

The researcher is well aware and is sure that all the active members of the society also must be aware that education today has become a business enterprise, leaving aside the Govt. institutions. It is the hope of pecuniary



gains coupled with educationist temperament which attracts people, or rather 'entrepreneur,' to set up schools. So is it possible that these educationist entrepreneur are also using a few gimmicks, a few colourful and fancy wrappings to sell their product at a higher cost? or, all these things do make a contribution? Now, by contribution here, we should not understand the contribution to the personality of a person because every type of experience does enrich the personality. Our concern is regarding the vocation a person chooses as education today has come to mean a means to get a suitable vocation for one's self. Hundreds of thousands of students crowding the corridors of our Institutions of higher learning are not there because they really want to draw out their inner selves, their inner potentialities which is, as recognised by Mt. Gandhi, the goal of education, but just in order to equip themselves better in their search for a prestigious vocation. That is why our government is trying to open more and more vocational institutions and trying to bifurcate academic and vocational education at the +2 level so that most of the students are shunted out to vocational institutions thus reducing the burden on colleges and Universities, which are bursting at their seams and finding themselves unable to handle the huge influx of students side by side providing quality education.

But one thing is certain, every child has to undergo schooling; the bifurcation can only come after school. But in our country, many children never get a chance to see the

face of a school. Many researchers have found that this is basically so because in most rural and many not so developed urban and semiurban areas girls are considered not requiring any education at all and this because they have to look after their homes and children only and not pursue a vocation. Those boys are also not sent to school who have to learn the family profession. They are made to learn the job since their childhoods. A case in point can be the recent ban by the European Economic Community on Indian carpets because it uses child labour. In agricultural families also, education is not considered very essential on the plea that the child in question does not have to take-up a service, meaning a 'vocation' other than agriculture, which he can learn by working on the fields only and not by 'wasting' his time in school.

All this discussion only goes to prove that in our country, education is, first of all, expected to make a person capable of landing a good job, and schools are the basic prerequisite for it.

With the help of this small research project, the researcher is trying to ascertain whether these schools, which boast of a varied number of facilities to their children and provide education in English medium, do really enhance the child's chances of future success or they do it just for the sake of their reputation of being 'the best' or, like any other business house, to attract the prospective customer?

The government had started the Operation Black-board some time back, with a view to provide certain minimum facilities to all the children in govt schools. Now it has to be ascertained, first of all, whether this minimum will be sufficient or we have to keep striving for more and more until we have reached the required standard? Operation Black-board is, no doubt, a step in the right direction, but how long is the way to the cherished goal, remains to be seen. Though this progress should never stop and we should keep walking ahead, setting new goals to achieve.

If we know how much dependent is a person's success in life upon the type of schooling and the medium of instruction etc. and are able to determine how much is the minimum requirement in terms of facilities, leaving aside the unnecessary and superfluous, it is the contention of the researcher that it will be some contribution towards providing good education to children thereby securing the future of the nation also.

It should be the interest and endeavour of every educationist of the country, worth the name, to strive for equal, really equal, educational opportunities to all the children of the country. Though this enormous task can by no means be completed within the limited life-span of one generation of educationists but "If we make a start today, someday we will conclude. If we work hard today our progeny might be able to reap the benefit some day" as the old

Chinese saying goes, and very rightly said too. So, the first humble step in this direction, from the researcher's side, is to ascertain whether really the future success of a child depends upon his schooling or there are other factors at work.

Keeping in view this situation the investigator has designed the present study, and also to see that if a relationship is found to exist between the two, what is the extent of it. It is hoped that this research, how much ever meagre it might be, will contribute something to the existing body of knowledge.

#### STATEMENT OF THE PROBLEM

This study will seek to compare the contribution made by various kinds of schools towards various vocational courses, with special reference to vocations like Engineering, Medical and Armed Forces. The areas included in this study will be-the type of schooling availed of by the candidates selected for the aforementioned vocations, the help provided to them by their parents in terms of studies and the affect of any special coaching in their success.

#### SIGNIFICANCE OF THE STUDY

The basic aim of education has always been considered as the all-round development of personality of the child. Education has always been supposed to make a person aware of his own capabilities as well as make him a useful person to the society. But with the passage of time, when man was

faced with the omni present economic problem of scarcity of means along with the very practical problem of earning a livelihood, another aim was expected to be fulfilled by education, that of making a person capable of earning a decent livelihood.

In today's world we find that this latter aim is more pronounced and it has also brought with it the commercialisation of education. Education has also become a commodity, to be sold in lieu of a certain amount of money and as happens in case of other commodities, i.e. more the money spent in purchasing the commodity, more is the satisfaction expected from that commodity, education also is expected to generate a feeling of satisfaction in the educand commensurate with the money he has spent in acquiring it.

There are various kinds of schools in our country. Some run totally on Govt. money, some which get partial grants from the Govt. whereas there are others like, public schools and other English medium schools which do not depend on Govt. grants at all. We see that this last category of schools is the most popular today. These schools are competing with each other in providing various kinds of facilities to the students claiming the all round development of personality and asking for more and more money for the same. And people are spending that money in the hope of bagging the most prestigious jobs available in future.

But many times what 'seems' is very different from what actually 'is'. The situation actually prevailing may be far away from what is generally believed.

This present study is expected to find out whether the type of school really makes a difference to what a person becomes (professionally) later, or not.

Every body wants to take up a profession which is considered prestigious and has a high status in society. The present study has taken various institutions into consideration which are preparing people for vocations which are considered prestigious in the society and are highly sought-after as the IMA, The Engineering University Roorkee, Medical College, Jhansi etc.

By comparing the educational back-ground of the people selected in these institutions this study is trying to establish the efficacy of various kinds of educational Institutions in securing these vocations.

Apart from Schooling, a person is dependent upon various other factors also like-the study atmosphere at home; education of parents, own capability and intelligence, various kinds of coachings etc. This study will help in finding out the most important factor responsible in making a person capable vis a vis the given vocations.

In the recent years there has also been a mushrooming of various 'Coaching Centres' claiming to perpare and often

giving a guarantee to students of qualifying in the entrance exams to Armed Forces, Engineering University or Medical Colleges etc.

This study will bring to light how far these claims are true and also whether any special coaching is required at all or not.

Today adult education is the call of the day. Our Govt. is making an all-out effort to educate the adult masses including women believing that it will ameliorate their lot and also help in the education of their next generation.

This study will also throw some light on the necessity or otherwise of having educated parents.

The results obtained will also help the planners in anticipating the facilities and help needed to be given to students if the nation requires a particular kind of professionals.

It will also help in dispelling the wrong notions prevailing, if there are any, regarding the importance or necessity of English Medium Education.

#### OBJECTIVES OF THE STUDY

The present study aims at realising the following objectives :-

1. To find out the number of students contributed to vocational courses by different kinds of schools.

2. To find out whether the education of parents makes a contribution in a student's selection for vocational courses or not.
3. To assess the importance of specialised coaching in getting a student selected for vocational courses.
4. To analyse the effect of the type of schooling on a person's chances of success.
5. To find out the most important factors responsible for a person's success, seen in terms of selection to vocational courses.

#### HYPOTHESES

1. Other things remaining the same school does not play a significant role in the selection of students for vocational courses.
2. Parents' education does not contribute significantly in the selection of students for a particular vocation.
3. Specialised coaching does not play a significant role in the selection of a student for a vocational course like Engineering, Medical and Army.
4. Medium of Instruction plays no role in a student's selection to the vocations under study.



*CHAPTER - II*

*REVIEW OF RELATED LITERATURE*

CHAPTER - IIREVIEW OF RELATED LITERATURE

Many researches done previously in India and abroad have helped the researcher in understanding the problem and its magnitude in correct perspective. There have been many studies on the adjustment problems of adolescents or college students etc. but they have also touched the subject undertaken by this researcher, here and there though from a different angle and with different aims nevertheless these studies do provide some insight into certain aspects of human adjustment, vocational preferences effect of family on achievement etc. which have helped the researcher in grasping and treating the problem correctly.

These studies are as follows-

LOUIS (1974) had conducted a study on the relationship between differential family patterns and the academic adjustment and achievement of public elementary school pupils. He found that elementary school pupils from homes with customary family patterns tend to be academically better adjusted than elementary school pupils from homes with differentiated family patterns.

BORING (1975) studied the effect of school setting, race and sex on the occupational interests of the students. The findings revealed that school setting had no observable effect on the occupational interests of the students while sex and race had a significant effect on the occupational

interests. However, sex had stronger effect than the race.

PETERSON (1982) studied the relationship of family structure to adjustment of school children. He found that the children with two parents were found better adjusted than the children with one parent.

KAKKAR (1964) studied the adjustment problems of adolescent boys and girls of XI class. The results obtained that 43% cases had serious adjustment problems; the school area possessed the greatest number of problems while in home area the adolescents were over dependent on parents. Girls accepted parental control but not boys.

BHAGIA (1966) investigated the problems of school adjustment and constructed an adjustment inventory. He found that girls exceeded boys significantly in their adjustment in general environment and organisational aspect of the school. He also concluded that private school pupils were significantly better than government school pupils in their adjustment to the teacher.

SINGH (1967) investigated the relationship of intelligence, achievement, motivation, manifest anxiety, extraversion, introversion and neuroticism or emotionality with the academic-achievement of the students. He found that (i) high and low-achievers were significantly discriminated (beyond .01 level) on all the variables namely-intelligence, achievement, motivation, manifest anxiety, extraversion,

intro-version and emotionality; (ii) Science students scored significantly higher on the intelligence test than the art students; (iii) intelligence and academic-achievement were significantly related (beyond .01 level) and (iv) academic achievement was found to be positively and significantly related to achievement motivation and manifest anxiety at 0.01 level and with extra version, introversion and neuroticism at .05 level.

**SAXENA (1967)** studied the needs, reactions to frustration, adjustment and vocational interest of the super normal, normal and sub-normals. He found the results that (i) super normal girls and boys possessed a high capacity to face frustrating situations and to adjust to the normal group. (ii) correlation between intelligence and different fields of adjustment for boys were .51 for Home; .43 for Health, .25 for social, .29 for Emotional and .48 for total adjustment; (iii) the correlation between intelligence and different fields of adjustment, for girls were as reported by Home .43, Health .29, Social .21, Emotional .22 and Total 0.41 and (iv) Vocational interest and intelligence had no relationship.

**GAUR (1974)** conducted his study on the factors affecting the occupational aspirations of adolescents. He found that there existed a significant difference between the level of occupational aspiration of intellectually superior and average students. The boys and girls did not differ significantly in their occupational aspiration

levels. A significant relationship was found between socio-economic status and level of occupational aspiration. while the relationship between organisational climate of a school and level of occupational aspiration was not significant.

KATIYA (1975) carried out a study of values and vocational preferences of Intermediate class students of U.P. He used Sherry and Verma's Personal Values Questionnaire and Thurstone's Interest Schedule. The study aimed at (i) to compare the vocational preferences of the students of different courses of study, religion, Hindu caste group, level of parent's income, level of father's education and profession and (ii) to study the relationship between values and vocational preferences of students. The results reveal that students were high in democratic, social, knowledge values while medium in health and religions. The students of very high income group were higher than the very low income group.

YADAV (1979) studied the role of intelligence, scholastic achievement, socio-economic status, values and needs as motives for vocational preferences. The descriptive method of research was used. Thurston's Interest Shedule, R.K. Tandon's Group Test of Intelligence, Jalota & Kapoor's Soci-economic Status Scale Questionnaire, Personal Values Questionnaire by Sherry & Verma and Tripathi Personal Preference Schedule. The findings of the study were that (i) intelligence had positive relationship with vocational preference of art students in physical science, biological

science, executive, computational, persuasive, linguistic, humanitarian and artistic areas while for science students the relationship of intelligence with vocational preferences in physical science, biological science and computational area are negative; (ii) Scholastic achievement and positive correlation with preferences in biological sciences for art students and negative correlation with preference in Biological sciences, executive, persuasive, linguistic and computational areas for science students; (iii) the most preferred vocational fields for adolescents were executive, linguistic and physical science while least preferred were musical, artistic and biological science areas and (iv) Among the values family prestige, health, hedonistic, democratic and aesthetic were significant motives for vocational preferences of adolescents.

SHARMA (1983) studied that self-concept and adjustment affected the academic-achievement. The sample of 1060 students of both girls and boys between age of 13-18 was drawn by random sampling from class X to XII. Ahluwalia's self-concept scale, Asthana's Adjustment Inventory, Rating Scale and Personal Data Schedule had been applied as tools. The results revealed that the self-concept affected academic-achievement. Adjustment did not influence academic-achievement.

RAWAL (1984) attempted to study the vocational interests of girl and boy students of Intermediate level of Almorah city. The study involved 400 students (200 boys and

200 girls) studying science and art subjects. Vocational Interest Record of Bansal and Srivastava was used to assess the Vocational Interest of the students. It was found that the boys and girls differ significantly in their vocational interest. Boys have tended to give preference to agricultural, artistic, executive, literary and scientific jobs, while girls preferred social, commercial and jobs related to household works. Students belonging to science group have shown their interest in technical and science vocations whereas arts students in artistic and literary vocations.

SONTAKEY (1985) found in her study that motivation principles were most potently operative to determine the behaviour of high and low achievers. Murray's statement "No brain, no personality" (Murray, 1959) was supported by the data obtained in her study. High achievers were charged with a high level of motivation to realise higher goals in their lives.

SINHA, TRIVEDI & GUPTA (1988) have studied that scholastic achievement was significantly associated with intelligence, socio-economic status and other family variables.

SHARMA, R.K. of Punjab University in the year 1978 made a study and analysed the Factors Influencing the Behaviour Patterns of Adolescents Studying in Different School Environments.

The Major objectives of the investigation were :-

- (a) To study the behaviour patterns of the normal adolescents studying in different school environments.
- (b) To study the inter relationship of areas of behaviour patterns of normal adolescents studying in different school environments.
- (c) To analyse the factors of the behaviour patterns which were influential in different socio-economic status (SES) schools.
- (d) To make a comparative study of the areas of behaviour patterns and factors of behaviour patterns of normal adolescents among different school environments; and to find out the differences, if any, and the levels of significance of the differences; and.
- (e) To attempt to offer suggestions regarding the adolescent development in the Indian situation in the light of the findings of the study.

The sample for the study included 400 normal adolescents in the age range 13 to 16 years, who had intelligence quotient of 100 or more, and who had not created any behaviour problems.

The major findings of the study were :-

- (a) Intelligence was an influencing factor in the development of behaviour pattern of the students in all types of schools.



- (b) Behaviour pattern of adolescents in low SES schools was significantly better than that of adolescents in the high SES schools.
- (c) The intelligence levels in moderately high SES and high SES school adolescents was significantly higher than those in the two other categories.
- (d) Schools SES did not significantly influence the sociometric status of the adolescents.
- (e) The normal adolescents were not rejected by their peers in any type of school environment.
- (f) The more the emphasis on sophistication and the more the complexities in the environment of the school, the lower the behaviour patterns, and vice versa.
- (g) On the basis of the total sample the behaviour patterns of normal adolescents were positively influenced by intelligence, self disclosure and sociometric status, whereas they were negatively influenced by the SES of the family.

SHANKAR (1977) and RAO (1978) have found that the students from poor families have lower self esteem.

After studying all this, above-mentioned literature the researcher found herself better equipped to tackle the field of study chosen by her, namely to find out the contribution made by different types of schools present in

our society to various types of vocations which are considered prestigious in our society; and also to find out what are the various factors that help students in their selection to these vocations. Though no study has been conducted so far in this field the above studies have been helpful in understanding some related facts and hence the researcher feels indebted and thankful to all the previous researchers for their efforts.

*CHAPTER - III*

*METHODOLOGY OF RESEARCH*

CHAPTER IIIMETHODOLOGY OF RESEARCHA-TYPE OF RESEARCH :

“The Normative survey Method of Research” will be followed.

Apart from the normative survey method, there are, various other methods also which are employed in research in education. The researcher feels that it will be appropriate if we discuss these in short here.

(1) HISTORICAL METHOD :

It is the application of the scientific method of inquiry to historical problems. It's procedure consists of first of all collection of data, it's criticism and then presentation of facts. The sources of collecting data for this type of research are primary like remains or relics associated with a person, group, event or person; oral or written testimony kept by witnesses or participants in an event, and secondary sources like the report of a person who relates the testimony of an actual witness or participant in an event.

This method is used for a wide range of problems like information concerning the effects of certain post-educational practices, concerning the development of certain concepts like child centered education and understanding of the deep rooted causes of the present - day educational problems etc.

## (2) EXPERIMENTAL METHOD :

This is the most scientifically sophisticated research method it can be defined as observation under controlled conditions. It seeks to establish the cause and effect relationship by observing changes occurring due to deliberate and controlled modifications of conditions, leading to an event.

This method seeks to study the effect of an independent variable on a dependent variable but its disadvantages are that certain variables have to be controlled which brings artificiality to the situation, and there are many intervening and extraneous variables which can not be controlled.

This method is used in educations to study problems like the effectiveness of different methods of teaching; the effect of immediate reinforcement upon learning etc.

## (3) CAUSAL COMPARATIVE METHOD :

This method seeks to establish causal relationships by comparing the circumstances associated with observed effects and by noting the factors present in those instances in which a given effect occurs or does not occur. We can say that this method seeks to find out the causes of certain current (and not past) occurrences or non-occurrences as they actually happen for they can not be arranged or pre-planned by the researcher.

This method is used in education to study problems like delinquency, under achievement, teacher effectiveness etc. and its biggest disadvantage is that it is essentially dichotomous i.e. both results and causes are thought of as either occurring or not occurring, either present or absent and does not give any evidence of the inter relation and interdependence of these causal factors.

#### (4) THE CORRELATION METHOD :

This method traces the relationship of measured variables over definite periods of time and approaches the problem of cause and effect in terms of degrees, not only dichotomies. In this regard it is an improvement over the causal Comparative Method.

This method is used in education to measure the strength of association between two or more factors; to make predictions based on association or correlation among variables like prediction of teaching success and selecting teachers according to a composite criterion of teaching success; to analyse cause and effect in class-room situations etc.

#### (5) THE CASE STUDY METHOD:

This method investigates the different factors that make - up the individuality of a social unit like a person, family, group or community. This method involves solving a particular problem at the individual level and for that it studies and analyses the interaction between various factors

leading to or influencing the situation under study.

It involves, first of all, selecting typical cases exemplifying the problem area under investigation and then collecting the required data by various means like observing behaviour, administering tests, collecting data from available records etc, after this the likely causes are tentatively diagnosed and a remedy is intituted. If this remedy brings about desired changes in the situation, then the diagnosis is judged as correct.

In education this method has been employed to study the problem cases, maladjusted pupils, truants, scholarship difficulties etc.

#### (6) THE GENETIC METHOD :

This method investigates the origin, direction, trend, rate, limit and decline of growth. We can say that it covers a long time investigation of biological phenomenon and is interested simply in the pattern of development.

In the field of education, this method has been employed to successfully study the characteristics of gifted individuals, to provide a record of past events in the development history of individuals or groups under study and helps in determining changes in the characteristics of various individuals as well as groups etc.

#### (7) NORMATIVE SURVEY METHOD :

Last of all we will discuss the method chosen by us for

this present study.

This method attempts to describe and interpret what exists at present in the form of conditions, practices, processes, trends, effects, attitudes, beliefs etc. It seeks to answer the question "What are the real facts with regard to the existing conditions." We can say that this method involves gathering of the data regarding current conditions for the purpose of ascertaining which is the normal or typical condition or practice.

For the study at hand, the researcher chose this method because she found this method to be fulfilling all her requirements, and hence better suited compared to all other research methods, as discussed below -

(a) Compared to the Historical Method, this method is more suitable as it deals with the present and not with the past as in the former.

(b) Compared to the experimental method, this method is better as it is oriented towards the determination of the status of a given phenomenon, as is required by the researcher in the present study, rather than towards the isolation of causative factors as in the former.

(c) This method is better than the case study method as it is based on large cross - sectional studies and, not intensive and longitudinal studies of the case study method, as was the purpose of the researcher.



(d) Compared to the genetic, the correlation and the comparative methods, this method is more suitable because this study is neither concerned with studying the biological phenomenon, nor with studying the dichotomous study of the causes of certain occurrences, nor with the relationships of measured variables, respectively.

For the present study the researcher wants to find the present status regarding the contribution made to different prestigious vocations, by different types of schools and also regarding the factors helpful for the same, so she found that this method was the most suitable.

#### **B-DELIMITATION OF THE STUDY :**

1. The study in hand has been confined to the analysis of the educational back-ground and causes of success of person's selection for Engineering, Medical and Armed Forces only so it does not include in its purview any other vocation.

2. This study is confined to assessing the contribution of various kinds of schools towards different vocations in India only, so it does not concern itself with the situations prevailing in other countries.

3. The study in hand has been confined to the students of Medical College, Jhansi, Roorkee Engineering University and I.M.A., Deharadun only. Hence it does not include in its purview students of other universities or institutions.

### C. POPULATION :

This research project will study the educational and family backgrounds of people selected for mainly three vocational courses i.e. Engineering, Medical and Armed Forces.

These three professions are such that command a lot of prestige in our society and are highly sought-after thus giving rise to a lot of competition for selection to the same. These vocations are also very different from each other and are expected to project the diverse nature of our society correctly.

### D. SAMPLE :

All the freshers, i.e. the first-year students selected for the above-mentioned vocational courses will be taken into consideration so that the information given by them regarding their schooling and home atmosphere does not suffer from any memory lapse and also to get a more or less homogeneous group in terms of age.

The institutions selected for study attract and receive students from all over India so the results obtained are expected to mirror the situation prevailing in the whole country.

### E. TOOLS USED :

Basically two tools have been used, that is Questionnaire and Interview. Questions asked in the

questionnaire and interviews were the same and they were pertaining to the educational and social back-ground of students, study atmosphere in their homes etc. The questions asked were of different types. Some questions required a free response, like the name and address of the candidate etc, in some questions many choices were given and candidates were asked to select the ones suiting to them the most; some required only Yes/No type of response while in others check-lists were provided and students were asked to check as many given facts as applied to them.

**The following questions were asked :**

1. Your full Name - (space was provided for the candidate to write his name)
2. Age -
3. Male or Female -
4. Married or Unmarried -
5. Educational qualification -
6. Name of the school where educated till 12th (including the name of the city/village, state and country).
7. Percentage of marks obtained by you in the selection exam for the present vocation.
8. Percentage of marks obtained by you in the 12th standard exam.
9. The monthly income of your father/guardian at the time of your selection.
10. Tick- mark the correct answer in the following - etc.  
(See Appendix).

A few students of the Engineering University, Roorkee and medical college, Jhansi were interviewed personally by the researcher, but no trainee at the IMA could be interviewed as permission was not granted for the same.

#### DEFINITIONS OF TERMS USED

1. Student of Medical college: This study will consider only the first year students of the Medical College.
2. Engineering Students: Only the first year students of various branches of Engineering (like Civil, Mechanical, Electrical etc). will be taken into consideration.
3. I.M.A. Cadets: Only the freshly selected cadets belonging to the first term, will be considered. Here I.M.A. stands for Indian Military Academy.
4. Vocational Courses : This term in the present study means Technical education like Medical, Engineering and Education for defence services.
5. Educated parents: This term implies a minimum Graduation-level study done by parents.

#### F ADMINISTRATION OF TOOLS

Typed questionnaires were distributed to all the first-term / year trainees of I.M.A., Engineering University and the Medical College. A small request given below, was attached to each questionnaire with the aim to elicit full and frank answers from students.

### A REQUEST FROM THE RESEARCHER

The researcher requests you for full co-operation and will be highly obliged if the data furnished by you is absolutely true as this is required for Research work and hence the conclusions ultimately drawn will also be factual. This will go a long way in dispelling the doubts, if there are any from the minds of people regarding the necessity or otherwise of English medium education and many other factors which might/might not be helpful to a person in his/her selection for vocations which are considered prestigious in the society. The researcher assures you that your identity will be kept a secret and your or your father / guardian's name will not be published anywhere.

\_\_\_\_ Please fill absolutely Factual Data. \_\_\_\_\_

As mentioned earlier, a few students were interviewed by the researcher herself. These interviews cleared a few doubts about the written questionnaire also like, most of the Engineering students had not given any response to Q 7 of the questionnaire (percentage of Marks obtained in the selection exam). After interviewing some students the researcher came to know that it was because they were not told the marks of their selection exam. In the same manner, some students had left Q15 unanswered, that is they had not ticked as their father's occupation, any of the four choices given. It was during an interview that a student responded that his father was employed in 'Agriculture' and not in any

of the choices provided, by this the researcher realised that these students may not be clear as to what all can be included in the term 'business'. In Q 12 also, some of the interviewed students told the researcher that they were neither taught by their parents nor by any other family member nor by a private tutor, but, instead they did studies on their own, with very little or no help from anybody. This explained why many students had not chosen any of the three responses provided in the questionnaire.

Interviews were completed on the spot only but a few days' time had to be given to students for filling up the questionnaires.

One fact that the researcher noticed during the course of a few interviews was that the candidates were reluctant to disclose the monthly income of their parents. Though, as is clear from the collected data, majority of students belong to the middle income group only, but still some students looked uncomfortable with the fact that they did not belong to well-to-do families. Probably that is the reason why as many as 15 have not responded to this query in the questionnaires.

*CHAPTER - IV*

*ANALYSIS AND INTERPRETATION*



CHAPTER -IVANALYSIS AND INTERPRETATION(A) TABULATION :

Before coming to any conclusions, a lot of study has to take place. The data collected, by itself, is not able to provide any significant information. So the data is first segregated under different heads and written in table forms.

In this study also, the data was sorted and stored in big tables having names of students on the left hand side, vertically, and questions asked at the top, on the horizontal side. After writing the name of each student, the information given by him was recorded by tick marking the answers chosen by him (See sample table A on page 45 ).

(1) Separate charts were made for all these vocations with the help of these charts, the information required for different calculations was again segregated into separate branching -tables, which then served as ready reckoners (See sample table 1 on page 45 ).

This table gave instant information when such information was required as - How many English medium students underwent coaching? and how many of them were from A or B or C or D type of schooling? In the same way information regarding students belonging to different income groups who resorted to coaching or who went to different



types of schools, was also instantly available and was used in various calculation.

(2) This table was divided into four portions (A) for English medium students whose parents were educated, (B) English medium students whose parents were not educated (ie. none of them was graduate), (C) for Hindi medium students having educated parents and (D) Hindi medium students not having educated parents.

Each of these four tables was divided into many columns and each 'type of school' was further divided into many columns as shown in sample tables (2) and (2A) on page 46 ).

This useful reckoner gives instant vocation-wise information regarding with or without coaching students coming from different type of schools (see sample table 3 on page 47 ).

Once all the data was tabulated in this manner, it could easily be used for various calculations required for analysing the data.



SAMPLE TABLE - 2

[illegible]

SAMPLE TABLE- 2A

A	B	C	D
HIGH ACHIEVER OR NOT, PRIOR TO SCHOOLING			
High	Not High	High	Not High
Father's income group			
H M L H M L H M L			

H = High income group, M = middle income group & Low Income group

SAMPLE TABLE - 3

	DATA	ENG'D - INDIV.	INDV.	TOTAL
(A)	With	With	With	
Govt. colleges	Govt.			
	Without	Without	Without	
	Govt.			
(B)	With	With	With	
Govt. Schools				
	Without	Without	Without	
(C)	With	With	With	
Govt. added				
Schools				
	Without	Without	Without	
(D)	With	With	With	
Govt. Engg				
Schools				
	Without	Without	Without	

After collecting and tabulating the data as required, it was subjected to analysis by statistical treatment.

As we have to ascertain the factors responsible for helping students in getting selected to prestigious vocations under study, we will now analyse the effect of these factors one by one, and also interpret the results side by side.

#### (1) EFFECT OF MEDIUM OF INSTRUCTION (ENGLISH MEDIUM Vs HINDI MEDIUM) ON SELECTION

The Dia-1; given at the end of this chapter clearly shows that out of all the selected students studied, nearly 77% had their education in English medium and only 23 % in Hindi/other languages. On calculating the  $\chi^2$  in a 2x2 contingency table, we find that the value of  $\chi^2$  is 90.2 i.e. very highly significant rejecting the null hypothesis that medium of instruction has no bearing upon selection of students for vocations under study.

These statistics, however, do not reveal the reason for this situation. On the face of it, we can say that English medium education helps the students in getting selected. Another fact that would back our conclusion is that the entrance-exams to the vocations under study are all conducted in English only. Not only that the professional study imparted to students after selection is also in

English. So a good knowledge of English language seems almost necessary.

Let us try to look at the other side of the coin and discuss the possible reasons for it. Some Hindi medium students, though much fewer in comparison have also been selected. How could they get selected? was it because (a) they possessed sufficient knowledge of English also or (b) is it that fewer Hindi medium students are selected just because there are lesser number of Hindi Medium students in the society today? c) another reason can be that Hindi Medium students shy away from these vocations seeing the predominance of English in them, and very few of them sit in the entrance exams.

When we look around us, we find that the reason (b) mentioned above does not hold true. There certainly are more Hindi/Regional language medium schools than English medium ones, and hence students are also more. But reason (a) and (c) look quite plausible. In an entrance examination conducted in English, only students with reasonably good knowledge of English can get selected and seeing the requirement of English through out the course, Hindi Medium students may be discouraged from trying for these vocations at all.

But all this goes to prove that English medium education does help a student atleast in the case of vocations under study. It does not however prove that Hindi

medium students are lacking in knowledge or expertise. It only shows that our country requires an over hauling of the whole society. A social situation where the 'language' and not the 'aptitude' can decide the vocation chosen by a citizen, is an aberration. But that is the subject-matter of sociologists, social - reformers and, to some extent, economists.

An educationist can only strive to impart education, seeing the social requirements and demands of people. So, here it looks as if English language is doing a valuable service to students. Who are certainly benefitting by it.

Now, let us study the situation prevailing in different vocations separately.

First of all we'll see the situation in IMA -

Out of a total number of 144 trainees, 137 had Eng. Medium, only 4 had Hindi medium and 3 had some other language as their medium of instruction.

Whether the  $\chi^2$  is calculated by combining the other languages and Hindi or with only English-vs-Hindi, this remains highly significant only, thus rejecting the null hypothesis that the medium of instruction has no influence on selections. (See Table 1 - A).

In the case of IMA, we see that 95.14% students have studies with English as the medium of instruction and only



4.86% with Hindi or some other language, leading us to believe that one has a chance of selection with English language only.

But when we look at other vocations, we find the situation quite different. In the Engineering University, Roorkee, out of a total of 80 students 54 are with English medium and 26 with Hindi medium i.e. 67.5% with English and 32.5 % with Hindi/other languages. The difference is quite a lot by English leading with a wide margin. (see table 1-B Dia-1).

The  $\chi^2$  is also significant (9.8) rejecting the null hypothesis but the situation is very different in medical college, out of 69 students 36 i.e. 52.17 % have had English medium in school while 33 i.e. 47.83% had Hindi medium. As is obvious, this difference is not very much and the  $\chi^2$  of 0.13 is also not significant, even at .05 level (See Table 1-C). So here we can accept the null hypothesis and say that the medium of instruction at school level, plays no significant role for a student's selection to the Medical College. (See diagram - 1)

Now, how can we analyse this difference in the three chosen vocations? As far as studies during the training period are concerned, all the study is done in English medium only, in all the three vocations. The entrance exams are also conducted in English in all three then why this disparity?



For IMA it may be the S.S.B. (Service Selection Board) that may be the decisive factor, as the interview is conducted in English only and candidates are expected to converse and express all their feelings and ideas in fluent English.

In this kind of a situation candidates not good in spoken English do not stand any chance of selection; and only those candidates can have good spoken English who have been brought-up in an English-speaking environment, in school and at home. Hence, we can say that in the Army the situation is biased towards English only, resulting in this predominance of English-medium candidates. Further research will be required to throw light on the subject. But on combining the data for Medical College and Engineering University; leaving aside IMA; we again find that English is predominant as we get  $\chi^2$  of 6.44 which is significant at 0.01 level at one degree of freedom thus rejecting the null hypothesis of no relationship between the two variables.

So, we can safely conclude that English medium students do have a better chance of selection to these prestigious vocations compared to Hindi medium or regional language ones.

#### (ii) EFFECT OF TYPE OF SCHOOLING (Vocation-wise)

Our prime concern is to see the contribution to the three prestigious vocations of our society, made by different types of schools with the aim to find out whether the schools with a large number of facilities to students, along with English medium education do really help a student in life or not.

We know that in some of the developed countries like America, parents are involved in their child's school activities to a very great extent and the stress on student-independence and games etc, is quite large. That is a kind of situation which we think of achieving but at present no school in India is involving parents to the extent of taking their participation in school activities but still many schools are trying hard to provide various kinds of experiences to students with the expressed AIM of all-round development of their personality.

Some such schools are charging enormous amount of money from parents and in some, like sainik schools, Central schools etc, the expenditure is being born by the government. Our study and the analysis of our data will help us in finding out whether this expenditure and the mad rush of today to get admission into such a school is really worth it or not.

When we analyse our own data, we find that out of a total of 294 trainees, 65 (or 22.1%) are from government colleges, 84 (28.6%) are from central schools, 63 (21.4%) are from private aided schools and 82 (27.9%) are from Public/English medium schools. (Dia 2)

This situation reveals that maximum contribution to these vocations is from Eng./Public schools or Central schools and the contribution made by Government colleges and private aided schools is comparatively quite less and almost equal to each other. It leads us to conclude that some facilities provided by Central schools, like co-curricular

activities, less teacher-pupil ratio, good library and lab facilities, educated staff etc. do help the student but other facilities like swimming, riding and all other non academic activities may not be contributing to the success of a child because otherwise, Logically, the contribution of Public/Eng. medium schools should have been substantially more than that of Central schools. We here see that the contribution of Central schools is almost at par with these schools thereby telling us that, the amount of facilities provided by such schools are sufficient.

It means, there is a requirement of upgrading other types of schools to the level of Central schools at least. We will discuss the facilities provided by Central schools and other schools later. At present, let us proceed further and see what is the situation like in various vocations.

[A] I.M.A. :

We are familiar with the the theory propounded by Gestalt psychologists that 'whole' is not always a summation of its parts, so it is essential that we study the situation prevalling in these parts separately and see whether the 'whole' resembles its parts here or not. Is it that a particular type of vocation attracts the students of a particular type of school or the situation is homogeneous in this regard. Let's take the situation in IMA first. Out of total of 144 subjects studied, the bulk of the contribution, that is 66 (45.8%) have come from Central schools, 43

(29.9%) are from public/English medium schools 22 (15.3%) are from private aided schools and the least number, i.e. 13 (9%) are from Government colleges. It shows that the environment provided by Central schools is the most conducive to students opting for Army. (See Dia 2)

But apart from the schools atmosphere, the atmosphere prevailing at home may also be a contributing factor. It has been seen that most of the students studying in Central schools are children of defence personnel and hence they may be more familiar and at home in the Army atmosphere making them more inclined to join the same; Whereas the children of persons in business or non-transferable jobs may not be attracted towards Army life with frequent transfers, light finances, likelihood of war and other exigencies of services disrupting peaceful family life.

#### [B] ENGINEERING :

On looking at the situation in Engineering University, we find that out of a total 89 trainees, the maximum number, i.e. 28 (34.6%) are from Private aided schools; 25 (30.9%) are from Government colleges; 17 ((21%) are from Public/English medium schools and only 11 (13.6%) are from Central schools. (See Dia 2)

Here we see that the situation has been reversed, which can only lead us to believe that either the environment prevalent in Central schools and Eng/Public schools is not

very conducive to serious studies required for Engineering where as Pvt. aided schools and Govt. colleges provide a better atmosphere. But we know that Government colleges are beset with many problems like, 'LACK' of funds resulting in lack of equipment, 'books in the library and other things which are considered essential in a good school. Apart from this they are overcrowded, teachers are underpaid and lack of motivation and discipline problems are common place. Apart from all this, teachers of good calibre are also not attracted to these schools because of less remunerations and lack of other perks and facilities given to them. On the other hand central schools as well as most of the Public/Eng. medium schools attract more qualified teachers and are well-equipped as regards books, equipment in the labs and games & sports departments etc. So it can not be said that the situation is not conducive to studies in these schools or is less so compared to Government Colleges or even Private aided schools so there must be other factors at work. We will analyse the other contributing factors later.

#### [C] MEDICAL:

Now let's study the situation in Medical College, Jhansi. Students come here from all over India and even from foreign countries.

Out of a total of 69 students, the maximum number of students are from Government colleges i.e. 27 (39.1%); 22 (31.9%) are from public/Eng. Medium schools 13 (18.7%) are

from Private aided schools and only 7 (10.1%) are from Central schools.

Here also, we see that bulk of the students are from Government colleges but the situation is different from Engineering, as, there, Public/Eng. medium schools are not a major contributors, but in the Medical college they are. But in both Engineering as well as Medical, Central-school contribution is the least where as in IMA it is the maximum (See diagram2).

### (iii) EFFECT OF RESERVATION

Let's see the effect of the factor of Reservation on this whole situation.

IMA does not follow the policy of reservation so the selection is purely on merit; but in Engineering University Roorkey and Medical college, Jhansi many students have been selected on the seats reserved for SC/ST/OBC, etc. Out of a total 78 students who responded to this query in the Engineering University, 19 (i.e. 24.4%) were from the reserved category, and in the Medical college, Jhansi, out of a total of 69 students, 20 (i.e. 29%) belong to reserved category.

We all know that reservation is not the correct criteria for selection; it is not true selection and so it may distort the picture. So let's see what the situation is like with only the general category students (see Dia.3). We have excluded the trainees at IMA from this study as there



are no reserved seats for any of the reserved classes. In the Engineering University, out of a total of 59 General category students the maximum contribution has been made by Government college and Private aided schools with 19 students each (i.e. 32.2%) coming from these, Eng-medium/public schools are not very far behind with 15 students (i.e. 25.4%), but the contribution of central schools is only 6 students (i.e. 10.2%). On comparing this information with the one already available including both General and Reserved categories we find that the situation is almost the same as, there also, the major contribution is by Government colleges and Private aided schools only, Eng.-med./Public schools are at the second place and Central schools are the last. It means reservation has had no effect on the situation.

Let's now study the situation in the Medical college, excluding the reserved candidates. We find that out of a total of 49 General category students, the maximum contribution is by Eng. Medium / Public schools with 18 students (i.e. 36.7%); contribution of Government colleges is almost the same with 17 students (i.e. 34.7%) the contribution of private aided schools and central schools is almost the same with 8 students (i.e. 16.3%) and 6 students (i.e. 12.2%) respectively. On comparing this analysis with the earlier analysis (including both General as well as the Reserved categories) we find that, though the bulk of students are from Government colleges and Eng-medium/public

schools only but here English Medium/Public schools are ahead of Government colleges with a slightly bigger contribution; the difference between the contribution of Private aided schools and central schools is very little though central schools are still contributing the least no. of students.

This whole discussion does not reveal any set pattern of selection to the vocations under study except that probably central school students have a bias and advantage for selection to IMA. There can be many reasons underlying this phenomenon which we will not discuss here.

#### (iv) EFFECT OF INCOME LEVEL:

Now we will discuss another aspect of the same problem namely, what was the income group of the parents of students belonging to different schools and also to see what percentage of students were selected in various vocations from different income - levels. For this let us divide the whole population into three income-levels - (1) Low- income group comprising of people having income below Rs. 3000/- per month (2) middle income group having income between Rs. 3000 and Rs. 10,000/- per month and, (3) the high income-group with monthly income of Rs. 10,000 or more. (See dia4).

We find that out of a total of 65 students belonging to Government colleges, the bulk of the students i.e. 40 (61.54%) are from middle income group, about its one third i.e. 14 (21.54%) are from Low income group and only 3



(4.62%) are from the high-income group where as 8 (12.3%) are silent on this point. (See Dia 5)

In case of Central school students, out of a total of 84 students the share of middle-income group is even greater i.e. 61 (72.62%) the share of low-income group is smaller, i.e. 15 (17.86%) and that of the high income group is very very small with just 2 students out of 84 (2.4%) where as 6 students (7.14%) are silent on this point (Dia 5).

The situation in case of private aided Schools is almost the same with the share of middle income group out of a total of 63, being the maximum with 46 students (73%) that from lower income group being 11 (17.5%) with a slightly bigger share coming from the high-income group with 6 students (9.5 %). (See Dia 5)

The situation is slightly different in case of Public/English medium schools with, out of a total of 82 students, the share of the middle - income group being the maximum compared to all other types of schools, with 71 students (86.6%) and the share of low-income group being the smallest compared to other types of schools, with only 5 students (6.1%) and only one student refusing the information. (Dia 5).

When we look at the over all picture, we find that out of a total of 294 cases studied, the maximum number i.e. 74.15% or 218 students come from the middle - income group

only having monthly income between Rs. 3000/- and Rs. 10,000/- Approximately one fifth of this number i.e. 15.31 % or 45 students belong to the low income group and just 5.44% or 16 students belong to the high income group, with 5.1% or 15 students not giving any response to this query (Dia 4). Now, what could be the possible reason for this occurrence? May be it is so because, as most of the sociologists contend, that the middle class people have the maximum motivation to work hard and do better and better in life. It is said that the aspirations and ambition of the low-income group are not very high. There are many reasons for it including lack of proper facilities and study atmosphere at home, but we will not discuss these here. It is also said that due to easy availability of material means of wellbeing and abundance of money and luxurious life, the motivation to work hard is low in the high income group also. Reasons are many, like, preference for other types of careers, already prosperous family business etc. We will not discuss these reasons here. The middle - income group students may be having the maximum ingredients, like parental support, proper study atmosphere, incentive to achieve something in life, non availability, but the desire to achieve a luxurious life etc. that is why maximum number of students belong to this category. We'll study the other factors influencing the selection of students, like education of parents, parents' efforts in teaching the students at home, effect of coaching etc.

If we cast a look at the three vocations separately also, we find that the three vocations are not attracting students from separate income - groups but all the three have got the major portion of their students from the middle-income group only. But out of a total of 16 high income group students, maximum number, i.e. 11 (15.3%) have gone to Engineering though the data is in-sufficient to draw any conclusions. (See dia.6)

#### (v) EFFECT OF PARENTS' EDUCATION:

Now, let us study whether the education of parents (till graduation) has had any effect on the selection of these students, or these two are not related.

We find that out of a total of 294 selected students 261 (88.8%) had either both or at least one educated (graduate) parent and only 30 (10.2%) who did not have educated (i.e. graduate) parents. The  $\chi^2$  of 186.24 is very highly significant rejecting the null hypothesis that education of parents has no influence on a child's selection to a prestigious vocation (Tab 2 : dia 8).

We can explain it by the fact that educated parents understand the importance of education and so they help and encourage their children to study well. They are willing to spend money and provide proper facilities and study atmosphere to their children, whereas uneducated or less educated parents do not take their children's study very seriously or they may find many types of educational

expenditure as waste-ful or unnecessary. This conclusion is not based on the present study as the data here is too insufficient to reach any generalization but it is a prevalent notion in the society and is based on various studies conducted by sociologists and educationists. Our present study is only helping to corroborate this notion.

(vi) EFFECT OF HELP AT HOME:

Now let us cast a look on how many parents insist on teaching their children themselves at home and whether this fact helped these children in their studies or not. As we can see here, 149 students (50.7%) were taught at home by their parents where as the rest i.e. 145 (49.3%) were either taught by some other family member or a private tutor or they were not taught by anybody (which we have taken to mean that they did self-study). So we see that whether children are taught at home by parents themselves or not, has very little bearing on the study and selection of students. The  $\chi^2$  of .054 here is very insignificant thus accepting our null hypothesis that being taught by parents personally has no influence on selection of a student to these vocations (Table 3). The essential thing is that the child should be taught by someone, as is evident from further analysis of the collected data, revealing that out of a total of 294 selected students in the three vocations 251 (85.4%) were taught by someone at home, i.e. either his parents or some other family member or a private tutor etc. and only 43 (14.6%) who were not taught by anybody. The  $\chi^2$  of 147.16 is

very highly significant here, rejecting the null hypothesis out-right, that there is no relationship between a student's selection and his being taught at home by someone (Tab. 4). Still the present data is no proof that the less number of students left on their own to study, among the selected ones, is due because such students are not able to cope-up with their studies on their own. Here some other factors may also be at work, like, may be this situation is due to the fact that most students in the total population do have somebody teaching them at home and students with no help at all are, as it is, in very small percentage of the total student population and, the same situation is being reflected in our sample also. More study is required to draw any conclusions in this regard. From our present study we can say that educated parents and somebody to help the children with their studies at home do influence their future prospects. But there may be other factors at work also, like coaching taken, type of schooling, student's own aptitude reflected in the percentage marks he achieved in the school exam etc. Let us study these situations one by one.

(vii) EFFECT OF COACHING:

In today's scenario coaching seems to be a very potent factor helping the students in selection. The researcher would like to study this factor in detail. In this regard we shall also study if there is any co-relation between the

parents' education and the coaching taken by the students to see whether the children of educated parents' opt for coaching for selection more or less compared to the children of uneducated (none of the parents graduates) parents.

But before that we must also know the effect of coaching on the selection of students. For this we must, first of all know how many students, in total, are with coaching and how many are without coaching.

A total of 291 students out of 294 responded to this query and out of these 291, 134 (45.6%) students took some form or the other of coaching prior to their selection, but 157 (53.4%) have been selected without any coaching. When we put these values in a  $2 \times 2$  table and apply statistical treatment to it, we get a  $\chi^2$  of 1.82 which, at 1 degree of freedom, is not significant. It means that our null hypothesis of no relationship between coaching and selection, is true (Tab. 5 and Dia 8).

Now, if this were true, we wouldn't be seeing such a mushrooming of various coaching centres all over the country, in every city and town, claiming guaranteed success to students coached by them. They even publish various data to corroborate their claims. It is a generally prevalent notion also that before any competitive exam, a student should take proper coaching for selection. Coaching centres are much in demand and are flourishing. Almost all the students around us seem to be taking coaching classes for one competitive



exam or the other. Then why is it that our study is telling us something which is opposite to what we see around us?

Of course there are many other factors also influencing the selection, apart from coaching but we must clarify all our doubts regarding the contribution of coaching. For this we will have to study, the situation prevailing in the three vocational courses separately to see if coaching has any influence on selection to any of them individually. (Dia 7)

We find that in IMA, the bulk of the students i.e. 117 out of 142(82.4%) have not had any formal coaching and only 25 (17.6%) took coaching.

On putting these frequencies in the 2X2 contingency table and subjecting this data to proper statistical treatment we get a  $\chi^2$  of 59.6 which is very highly significant, thus rejecting our hypothesis of 'no relationship' between 'coaching' and 'selection'. (Table-6). But while reaching any conclusion we must remember that in IMA most of the students are 'without' coaching telling us that if there is any relationship it is between 'no coaching' and selection. It means that coaching has an inverse relationship with selection; that is, a person with coaching will not be selected and one without coaching only will be selected (Dia-7). Now, the absurdity of this conclusion is self-evident. This is like saying 'eating induces hunger' and 'not eating satisfies hunger'. This thing goes totally against known facts, logic and common

sense, so we will have to search for an appropriate explanation for this phenomenon.

We can say that most of the students appearing in the selection exam of IMA do not take coaching and hence there is a higher percentage of them among the ones selected. But a question may be asked that why do IMA candidates shy away from coaching, specially when in today's world, coaching has become a significant part of a student's life till he selects a profession? We will discuss this point again after some time. Here it is sufficient to say that, since coaching can not have a negative effect on a student's performance, we can say that coaching is not helpful in selection to IMA.

Now we should take-up the situation prevailing in the Engineering University. Here we see that out of 80 students, 54(67.5%) have undergone coaching and 26 (32.5%) are without coaching. Here, clearly, more students are 'with' coaching than without it (Dia-7). On putting this data in the 2X2 table, we get a  $\chi^2$  of 9.8 which is clearly significant, rejecting our hypothesis of no relationship between coaching and selection. So we can say that coaching does help for selection to Engineering, though there may be other factors also like the student's own calibre and intelligence, effect of educated parents, effect of good schooling, proper motivation at home etc; which may be working in the same direction (table 7).



Let us now take-up the case of Medical college. Among 69 students 55 (79.7%) i.e. a higher percentage than even the Engineering students, are with coaching and only 14 (20.3%) are without coaching (Dia-7). On giving the same statistical treatment to this data also we get a  $\chi^2$  of 24.4 which is very highly significant thus rejecting outright our hypothesis of 'no relationship' between coaching and selection (table 8). Here again, like for Engineering, there may be many factors helping a student but coaching certainly, it looks, is one of them.

This whole discussion tells us that if we do not include IMA in this analysis then the selection of students shows a significant relationship with coaching and it is IMA only showing an inverse relationship with coaching which is affecting the calculation of all the 291 students (all the three vocations) and making the relationship 'not significant' with a  $\chi^2$  of 1.82. IMA can be called an exceptional place where coaching is not helpful (Table 5).

We know that for selection to IMA, not only a student's knowledge and academic competence but his total personality, including his physical health and attitude towards life etc. are also judged and they have specialised physical and psychological tests for the same, including an interview in front of a board comprising of many members. We also know that any short term coaching can not alter the personality of a child. Probably this is the reason very few students undergo coaching for IMA, hence the less percentage of them

is selected. But in both the other vocations only the knowledge and academic competence is required to get selected, there being no psychological or physical test and no interview, students are able to improve upon their knowledge of the subject and so coaching is helpful to them.

One more phenomenon is at work during the IMA selection, which again goes against coaching. It is common knowledge that any type of formal coaching, with the specific aim of selection to IMA, is not appreciated by the selectors, as it gives students an 'acquired' behaviour where as IMA selectors seek to judge the original, basic nature of a person. So it may be that students do not undertake coaching not to jeopardize their selection; or, may be, they do take coaching but are reluctant to tell for the same reason.

So, seeing the entirely different types of requirements of these different vocations, it is better if we study the effect of coaching on IMA trainees and those in other vocations separately.

#### viii PARENTS' EDUCATIONAL STATUS AND COACHING

Now, as we had decided earlier, we shall study the relationship of parents' educational status with coaching required by students to get selected.

Today our Government is putting a lot of effort into making the adult education programme a success. The need to

educate the adults has been felt not only because it will enlighten our uneducated masses and improve their understanding of the world around them, but also because it will help in the education of the next generation. Maximum number of uneducated people are found in the economically weakest sections of the society, and the situation is not improving very fast despite the availability of free education and despite a ban on child labour.

This situation prevails, to a large extent, due to the fact that parents of these children do not understand the importance of education. They do not feel that education is going to make any contribution to their children's wellbeing. And it always happens in case of uneducated parents.

Many studies have been conducted and it has been found that educated parents are more aware of the need for education and they would do everything in their power to provide proper education to their children. Educated parents are also able to help their children in studies at home. On the basis of this fact only we want to find out whether the graduate level studies of parents help a child in his studies, or not. For this we will study whether the children of educated (graduate) parents also have to take coaching before selection, to the same extent as the other children (whose parents are not graduates) or they do it to a lesser extent.

On analysing the collected data we see that out of a total of 261 students with educated parent 118 (45.2%) have had some form of coaching before selection where as 143 (54.8%) have been selected without any coaching and out of 30 students whose parents are not educated. 16 (53.3%) are with coaching where as 14 (46.7%) are without coaching (Dia 8). On putting these vocations in a two fold contingency table and subjecting it to proper statistical treatment we get a  $\chi^2$  of .7 Which is not significant at both .01 and 0.05 levels, so we should accept our hypothesis of null that the educational status of parents has no relationship with the coaching undergone by students for their selection (table 9). We had earlier seen that the situation in IMA is exactly opposite to that found in Engineering and Medical, regarding coaching. So let us study the situation pervailing in Engineering University and Medical College together and that in IMA separately.

After proper calculations, we find that for Engineering and Medical students, combined the  $\chi^2$  0.027 and the  $\chi^2$  =.104 (N=149) which is not significant, accepting our Null hypothesis of no relationship between parents' education and coaching (Tab-9B).

In case of I.M.A. the  $\chi^2$  comes out to be .046 and N is 142, so we get a  $\chi^2$  of 0.3 which, again, is not significant. Here again our hypothesis that parents' education and coaching are not related, is accepted (Tab. 9A)

Thus we see that in Engineering + Medical and IMA separately also, no significant relationship exists between the education of parents and coaching. It means that if students take coaching before their selection exams, they do so due to some other reason and not because their parents are not educated or educated. These 'other reasons' can be that coaching is a specialised education with a specific aim. Coaching is not imparted with the aim of increasing the over-all education of students but it is for the sole purpose of qualifying in a certain specific competitive exam. Parents may be able to help students with general studies but this type of teaching they can not provide at home. Coaching centres keep a track of the examination - patterns of competitive exams; the type of questions asked there, the inclination of these exams towards one subject or the other etc. and they provide coaching according to the same. The competition is so fierce that students do not want to leave anything to chance and don't want to leave any stone unturned, that is why maximum number of students take coaching, irrespective of the educational status of their parents. We had earlier studied that coaching does help the students in vocations like Medical college and Engineering, but there are many students who are selected without any coaching also. Then why is it that many students have to take coaching? We have already eliminated any relationship between the parents' education and coaching.

(ix) TYPE OF SCHOOLING AND COACHING :

We have also concluded earlier that the maximum contribution to these vocations is from Pub./Eng. medium schools and Central schools. We know that coaching is taken by students to increase their knowledge and improve their performance in the test. Now if we say that Public/Eng. Medium or Central Schools help a student in future selection to these vocations then it also follows that students having studied in these schools should be less dependent on coaching compared to those who studied in Government colleges or private aided schools. Let's analyse the data and find out what the situation actually is. For this, we will have to divide the school into two groups. The first group or group A containing the Public/Eng. Medium schools and Central school students and group B having Government colleges and privates aided schools. (See dia 9)

We find that out of a total of 166 students belonging to pub./Eng. medium schools and Central schools (i.e gp-A) 60 (20.7%) are with coaching, 4 have not responded and 102 (35.2%) are without coaching and out of a total of 128 students in group B, 73 (25.2%) are with coaching and 55 (19%) are without coaching. On calculating the relationship between the two we get a  $\phi$  co-efficient of 0.2 and a  $\chi^2$  of 11.6 which is significant at both the .05 and .01 levels (tab 10). It means our null hypothesis that there is no relationship between the type of schooling and whether students have to undergo coaching, stands rejected; but of



course, we can not straight away conclude that group A schools somehow help the students in their selection, to the extent that they can be selected without any extra coaching.

But as we have seen earlier the situation is entirely different regarding coaching in case of IMA candidates; so we should study the situation in IMA separately from that in Engineering and Medical college. We can do this here by first putting separately the students belonging to different schools, and deviding them into 'with coaching' and 'without coaching' groups.

This will provide us a comparative estimate of all the four types of schools and show us their effectiveness vis a vis coaching. Now, to segregate the IMA candidates, we can further devide the 'with' and 'without' groups belonging to each type of school into the groups of students selected to different vocations. (See dia 10).

We find that maximum number of 'without coaching' students are from Central Schools, the next big share is of Eng./Pub. Schools, the next are Private-aided schools and the least number is from Government colleges. But side by side, one more interesting phenomenon is also visible here, that the contribution of students to IMA, is also in the same order, that is, the maximum number is from Central Schools, then from Eng./Pub. schools, then from Private-aided schools and the least number is from Government colleges (See dia

10). This analysis clearly shows that more the number of IMA candidates belonging to a school, more is its percentage of without-coaching students. And if we take into consideration only the Engineering and Medical students, the share of without-coaching students becomes very less, showing thereby that coaching does influence selection keeping aside an exceptional case like IMA, which due to entirely different requirements, does not encourage coaching by its candidates.

As we have already calculated a  $\chi^2$  of 11.6 to show the relationship between the type of schooling and coaching for all the students it follows that we should do the same for the students belonging to the three vocations separately too (Tab. 10).

First of all, taking-up the case of IMA candidates, we see that out of 107 students from group A schools 90 are without coaching and only 17 are with coaching.

In the second group, that is students from group B schooling, 27 out of 35 are without coaching and only 8 are with coaching. When we put these values in a 2 X 2 table and calculate the relationship we get a  $\phi$  co-efficient of .08 and a  $\chi^2$  of .85 which is not significant at D.F. = 1, accepting our null hypothesis that there is no relationship between good schooling and coaching (tab. 10-A). But seeing the predominance of 'without coaching' students, we can say that one does not require coaching for selection to IMA,



irrespective of the schooling.

In case of Engineering students, out of 28 students from group A schooling, 21 are with coaching and only 7 are without coaching. Like wise, out of 52 students from group B schooling, 33 are with coaching and 19 are without coaching. After suitable calculations. We get a  $\phi$  co-efficient of 0.1175 and a  $\chi^2$  of 1.12 (N is 80 here). This value of is also not significant and so we have to accept the hypothesis of no relationship between 'type of schooling' and coaching (tab. 10B). Here we see a predominance of with coaching students, which tells us that for selection to Engineering, one has to take proper coaching, whichever type of school one belongs to.

The third case is of Medical college students. We see that of 29 students from group A schooling, 23 are with coaching and just 6 are without coaching. In the same way, out of 40 students from group B schooling. 32 are with coaching and rest 8 without coaching. This data gives us a  $\phi$  co-efficient of .0085 and a of .005 which is very insignificant, so we have to accept the hypothesis of no relationship between the type of school one has studied in, and coaching (tab 10 C). Here again 'with coaching' students are in a big majority leading us to conclude that for selection to the medical profession also, coaching is essential, no matter what type of schooling one has had.

We see that within each vocation there is no

relationship between the type of schooling and coaching. All this detailed discussion has told us that it is the vocation one is going to join which determines whether one has to take coaching or not, and not the type of schooling one has had.

This conclusion is very interesting and very important also as it throws a very significant light on our total study. In this study, we basically want to know whether the type of schooling one has had, has any influence on a student's future prospects of selection to a prestigious vocation in society or not. For this, we first had to ascertain the influence exerted by other factors like coaching, parents' education, economic stratum one belongs to, academic capability of the student himself etc. So now atleast we have come to know that schooling is independent of coaching. Had it been related to coaching it would have meant that coaching and schooling work side by side and a student who had not had a good schooling would have had to take coaching for getting selected in competitive exams. But now we know that if a student takes coaching for selection it is not because something was lacking in his school but because of the special preparation required for selection to his chosen vocation. And in case of vocations where coaching is of no help, he will not take coaching. In other words, it means that, though schooling does exert an influence, which is evident in the predominance of students from Central schools and Public/English medium schools. In the three selected vocations, the coaching taken by students

does not depend upon their schooling, but on the demands made by their chosen vocation.

In IMA we know that out of a total 142 trainees who responded 25 are with coaching and 117 are without coaching. Out of these 25 students with coaching 17 (12%) are from type A schools and 8 (5.6%) are from type B schools. In the same manner, out of 117 students without coaching 90 (63.4%) are from group A school and 27 (19%) are from group B schools (Dia 13). On subjecting this data To statistical treatment, we get a  $\phi$  co-efficient of .08 and a  $\chi^2$  of 0.85 which is not significant at 1 degree of freedom (Tab. 10 A).

In case of Engineering University too, out of a total of 54 students with coaching 21 (26.3%) are from group A schools and 33 (41.2%) are from group B schools, where as out of 26 'whithout coaching' students, 7 (8.8%) are from group. A schools and 19 (23.8%) are from group B schools (Dia 13). In this case, we get a  $\phi$  co-efficient of 0.1175 and a  $\chi^2$  of 1.12 which, again, is not significant. (Tab 10B).

Last of all, in the case of Medical college also, out of 55 'with coaching' students, 23 (33.3%) belong to group A schools and 32 (46.4%) belong to group B schools and out of 14 'without coaching' students 6 (8.7%) belong to group A schools and 8 (11.6%) belong to group B schools (Dia 13). Here, we get a  $\phi$  co-efficient of .0085 and a  $\chi^2$  of .005

which is highly insignificant. (Tab. 10C)

Thus, again, we find that there is no relationship between the type of schooling one has had and coaching.

But while we are at it, we must not forget that some students are high achievers, with better academic aptitude, and some are low achievers. This fact, coupled with the fact that most of these so called good schools follow the selective admission policy whereby admission tests are given and only selected students are given admission in the school. It follows that such students may be so good themselves that they would not require any coaching in which ever school they may study.

Now let's analyse the situation and see how many high achievers in school have had to undergo coaching for selection to the vocation of their choice. For this we will first divide all the students into two categories, 'high achievers' and 'not high achievers,' the former category containing students who scored 70% or more marks in their school exam and the second category having students scoring marks less than 70%. The mid-point has been taken as 70% because, though the first division starts at 60% we have to take a percentage sufficiently high, which we can assume to be representing high achievers, without any doubt.

We find that out of a total 294, 7 students are silent on the subject where as 287 have responded, and out of these 287, 136 are high achievers out of which 73 have taken

coaching and 63 have not. 151 are not high achievers out of which 59 have taken coaching where as 92 have been selected without any coaching (dia 11) On putting these values in a four fold table, we get a  $\phi$  of  $-.15$  and a  $\chi^2$  of  $5.74$  which is significant at  $.05$  and  $.02$  levels but not at  $.01$  level. It means, this value can not occur by chance more than twice out of a hundred times; so our null hypothesis, that the academic achievement of a student revealed in his percentage marks obtained in twelfth class exams have no influence on whether he has to take coaching or not, stands rejected (Tab.11).

But strangely enough, when we subject the data of all the three vocations separately to statistical treatment, the  $\chi^2$  comes to be 'not significant' in all the three, thus accepting the null hypothesis in all the three, that whether a student takes coaching for selection or not is independent of his academic achievement, reflected in his percentage marks obtained in 12th class (See tab 11A and tab 11B).

Hence we require more data to draw any concrete conclusions.

#### (x) SELF INTEREST AND SELECTION

Out of the many factors that contribute, or we can say, help the students in their selection to the vocations under study, one factor can be the 'desire' of the student himself to opt for that particular vocation. The desire or interest, or determination to enter a specific vocation makes a

student Focus and he prepares himself accordingly. This may be the motivational force behind his all other efforts. So, our study will be incomplete if we do not look into this aspect over in detail.

There may be many reasons for a person opting for a vocation.

We know that in our country people are very rarely able to choose a profession according to their aptitude and interest. Due to the huge problem of unemployment people are very often forced to be content with what they get rather than what they want. Competition is very fierce for entrance to any vocation, so students keep trying for as many vocations as possible by appearing in their competitive exams and are content with which ever vocation they are selected in.

Familiarity with a particular profession also may play a role in the choice of vocation by a student. When children see their father, mother or some other family member doing well in a profession, they are also motivated to join the same and hence try for it. Then, familiarity with a profession also contributes. Each profession brings with it a certain type of atmosphere at home also, and we all know of the human tendency to remain in familiar atmosphere. Many times we come across reknowned doctors whose sons/daughters also became doctors; business men whose children carry on their father's business only; teachers whose children opt



for teaching as a career though few people from other walks of life want to take-up this profession out of choice seeing the meagre earnings of teachers etc. Apart from these there can be any number of other reasons affecting an individual's decision to join a particular profession. We must discuss at least the prominent reasons here. For this, let us segregate the 288 students who responded to this query, under three headings :-

(1) Those who chose their vocation because their father, mother or some other family member was in it.

(2) Just because they got the opportunity to join it. We must understand that here only those students will join who are not very particular about the vocation of their choice. Many times students do not even have a clear focus to achieve something in life. In the researcher's opinion most people in the country fall under this category today. The first and foremost concern of people today is to find a vocation which would give them sufficient earnings to live a comfortable life side by side giving them a status a prestige in society. So, as soon as they get a chance to join a profession fulfilling these requirements, people opt for it.

(3) There can be hundreds of other reasons which may differ from individual to individual depending upon the family circumstances, expectations of family members; place (City/Town etc.) where a person may have to live to pursue

it, the finances required to undertake the required training the time period required before their earning can commence and ofcourse the personal interest of an individual etc. Since all these reasons are not general in nature, they can be put together and given a heading ``other reasons``.

On segregating the students under the above mentioned three groups we find that only 72 (25%) have opted for their vocations because their father, mother or some other family member was in it; 91 (31.6%) have opted for it just because the opportunity presented itself and 125 (43.4%) have given ``some other reason`` as the cause (see dial2).

It clearly tells us that reason no. 2 is a major factor, influencing the decision of people in joining their chosen vocation though familiarity due to father/mother or some other family member being in the same vocation is not far behind.

Thus we see that there are many factors contributing towards the selection of students to prestigious vocations and no one factor alone can be given the credit.



$H_0$  = Medium of instruction has no bearing upon the selection of a student to a vocation.

	English medium	Hindi Medium	Total
Fo	226	63	289
Fe	145.5	144.5	289
Fo - Fe	81	- 81	
$(Fo - Fe)^2$	6561	6561	
$\frac{(Fo - Fe)^2}{Fe}$	45.1	45.1	
<u>Fe</u>			

$$\chi^2 = \sum \left[ \frac{(Fo - Fe)^2}{Fe} \right]$$

$$= 90.2$$

At,  $df = 1$ , This value of  $\chi^2$  is very highly significant, thus rejecting our null hypothesis.

TAB. 1-A

## I.M.A.

$H_0$  = Medium of instruction has no bearing upon a student's selection to I.M.A.

	English medium	Hindi / other medium	Total
Fo	137	7	144
Fe	72	72	144
Fo - Fe	65	- 65	
$(Fo-Fe)^2$	4225	4225	
$(Fo-Fe)^2$	58.7	58.7	
Fe			

$$\chi^2 = 117.4$$

At  $df = 1$ , This value is highly significant thus rejecting our null hypothesis.

TAB-1-B

ENGINEERING UNIVERSITY

$H_0$  = Medium of instruction has no bearing upon a student's selection to engineering.

	English Medium	Hindi Medium	Total
fo	54	26	80
fe	40	40	80
(fo-fe)	14	-14	
$(fo-fe)^2$	196	196	
$(fo-fe)^2$	4.9	4.9	
fe			

$$\chi^2 = 9.8$$

At  $df=1$ , this value of  $\chi^2$  is significant at .01 level, thus rejecting our null hypothesis.

TAB-1-C

MEDICAL COLLEGE

$H_0$  = Medium of instruction has no bearing upon a student's selection to the medical college.

	English Medium	Hindi Medium	Total
fo	36	33	69
fe	34.5	34.5	69
(fo-fe)	1.5	- 1.5	
$(fo-fe)^2$	2.25	2.25	
$(fo-fe)^2$	.065	.065	
fe			

$$\chi^2 = .13$$

At  $df=1$ , This value of  $\chi^2$  is not significant thus our null hypothesis stands accepted.

TAB. 2

Relationship between the educational status of parents and selection of students to prestigious vocations.

$H_0$  = The selection of students to the vocations under study is not related to the educational status (graduate-level) of their parents.

	Educated parents (at least one)	Not educated Parents	Total
Fo	264	30	294
Fe	147	147	294
Fo - Fe	117	- 117	
$(Fo-Fe)^2$	13689	13689	
$(Fo-Fe)^2 / Fe$	93.12	93.12	

$$\chi^2 = \sum \left[ \frac{(Fo - Fe)^2}{Fe} \right]$$

$$\chi^2 = 93.12 + 93.12$$

$$\chi^2 = 186.24$$

$$df = 1$$

This value of  $\chi^2$  is highly significant, thus rejecting our hypothesis of independence of coaching and parents' education.

TAB. 3

$H_0$  = The selection of students to the vocations under study is not dependent upon whether the students are taught at home by their parents or somebody else (including self-study).

	Taught by Parents	taught by other	Total
Fo	149	145	294
Fe	147	147	294
Fo - Fe	2	- 2	
$(Fo-Fe)^2$	4	4	
$(Fo-Fe)^2$ Fe	.027	.027	

$$\chi^2 = \sum \left[ \frac{(Fo-Fe)^2}{Fe} \right]$$

$$\chi^2 = .027 + .027$$

$$\chi^2 = .054$$

$$df = 1$$

This value of  $\chi^2$  is highly insignificant, thus accepting our null hypothesis.

TAB. 4

$H_0$  = There is no relationship between a student's selection to the three vocations under study and whether the student is taught at home by some one or does self study.

	Students by some one	Student not taught by any one	Total
Fo	251	43	294
Fe	147	147	294
Fo - Fe	104	- 104	
$(Fo-Fe)^2$	10816	10816	
$(Fo-Fe)^2$ Fe	73.58	73.58	

$$\chi^2 = \sum \left[ \frac{(Fo - Fe)^2}{Fe} \right]$$

$$= 73.58 + 73.58$$

$$= 147.16$$

$$df = 1$$

This value of  $\chi^2$  is highly significant, thus rejecting our null hypothesis.

TAB. 5

$H_0$  = Selection of students to the three vocations under study, has no relationship with any coaching taken by them.

	Student with Coaching	Students without Coaching	Total
Fo	134	157	291
Fe	145.5	145.5	291
Fo - Fe	- 11.5	11.5	
$(Fo - Fe)^2$	132.3	132.3	
$\frac{(Fo - Fe)^2}{Fe}$	.91	.91	
Fe			

$$\chi^2 = \sum \left[ \frac{(Fo - Fe)^2}{Fe} \right]$$

$$= 1.82$$

$$df = 1$$

This value of  $\chi^2$  is not significant hence our null hypothesis is accepted.



TAB. 6

Ho- Selection of students to I.M.A. has no relationship with any coaching taken by them.

	Student with Coaching	Students without Coaching	Total
fo	25	117	142
fe	71	71	142
fo - fe	- 46	46	
$(fo-fe)^2$	2116	2116	
$\frac{(fo-fe)^2}{fe}$	29.8	29.8	
fe			

$$\chi^2 = \sum \left[ \frac{(fo - fe)^2}{fe} \right]$$

$$df = 1$$

$$= 29.8 + 29.8$$

$$= 59.6$$

This value of  $\chi^2$  is very highly significant hence our hypothesis of null stands rejected.

TAB. 7

$H_0$  = Selection of students to Engineering University,

Roorkee has no relationship with any coaching taken by them.

	Student with Coaching	Students without Coaching	Total
fo	54	26	80
fe	40	40	80
fo-fe	14	- 14	
$(fo-fe)^2$	196	196	
$(fo-fe)^2 / fe$	4.9	4.9	
$\chi^2$			

$$\chi^2 = \sum \left[ \frac{(fo - fe)^2}{fe} \right]$$

df=1

$$= 4.9 + 4.9$$

$$= 9.8$$

This value of  $\chi^2$  is significant so our null hypothesis is rejected.

TAB- 8.

$H_0$ . = Selection of students to Medical College, Jhansi has no relationship with any coaching taken by them.

	Student with Coaching	Students without Coaching	Total
Fo	55	14	69
Fe	34.5	34.5	69
Fo-Fe	20.5	- 20.5	
$\frac{(Fo-Fe)^2}{Fe}$	420.3	420.3	
$\frac{(Fo-Fe)^2}{Fe}$	12.2	12.2	
Fe			

$$\chi^2 = \sum \left[ \frac{(Fo - Fe)^2}{Fe} \right]$$

$$df = 1$$

$$= 12.2 + 12.2$$

$$= 24.4$$

This value of  $\chi^2$  is highly significant, thus rejecting our null hypothesis.

TAB. 9

Relationship between the educational status of parents and coaching undertaken by students.

H<sub>0</sub> = There is no relationship between the educational status (Graduate Level) of parents and coaching taken by students for selection.

	without coaching		with coaching	
Parents educated (at least one)	143	B	118	A
Parents not educated (i.e. none of them a graduate)	14	D	16	C

$$\phi = \frac{AD - BC}{\sqrt{(A+B)(C+D)(B+D)(A+C)}} = \frac{1652 - 2288}{\sqrt{261 \times 30 \times 157 \times 134}}$$

$$= \frac{-636}{16.2 \times 5.5 \times 12.5 \times 11.6} = -.049$$

$$\chi^2 = N \phi^2 = 291 \times .0024 = .7$$

$$df = 1$$

$$N = 291$$

$$\phi^2 = .0024$$

This value of  $\chi^2$  is not significant, thus accepting the null hypothesis.

## TAB- 9A

$H_0$  = There is no relationship between students' selection to I.M.A. and their parents' educational status.

	Students with Coaching		Student with- out Coaching	
Parents educated (at least one)	107	B	22	A
Parents not educated	10	D	03	C

$$\phi = \frac{220 - 321}{\sqrt{129 \times 13 \times 117 \times 25}} = -.046$$

$$\begin{aligned} \chi^2 &= N\phi^2 & N &= 142 \\ &= 142 \times .0021 & \phi^2 &= .0021 \\ &= .3 & df &= 1 \end{aligned}$$

This value of  $\chi^2$  is not significant so our null hypothesis is accepted.

TAB. 9 B

$H_0$  = There is no relationship between selection of students to Engineering and Medical College and the educational status of their parents.

	Students without Coaching		Student with Coaching	
Parents educated (at least one)	36	B	96	A
Parents not educated	04	D	13	C

$$\phi = \frac{384 - 468}{\sqrt{132 \times 17 \times 40 \times 109}} = \frac{-84}{3127.9} = -.027$$

$$\chi^2 = N \phi^2 = 149 \times .0007 = .104$$

$$df = 1$$

$$N = 149$$

$$\phi^2 = .0007$$

This value of  $\chi^2$  is not significant so our null hypothesis is accepted.

$H_0$  = There is no relationship between the type of schooling a student has had and any coaching taken by him.

	Type A school (Central + / English Medium	Type B School (Govt. College+Pvt. aided School)
Students with coaching	60 B	73 A
Students without Coaching	102 D	55 C

$$\phi = \frac{AD - BC}{\sqrt{(A+B)(C+D)(B+D)(A+C)}} = \frac{4146}{11.5 \times 12.5 \times 12.7 \times 11.3}$$

$$= .201$$

$$df = 1$$

$$\chi^2 = N \phi^2$$

$$N = 290$$

$$= 290 \times .04$$

$$\phi^2 = .04$$

$$= 11.6$$

This value of  $\chi^2$  is significant so our null hypothesis stated above is accepted.



$H_0$  = For IMA trainees, there is no relationship between the type of schools they have had and any coaching taken by them.

	Type A schools		Type B Schools	
Students with coaching	17	B	08	A
Students without Coaching	90	D	27	C

$$\phi = \frac{720 - 459}{\sqrt{25 \times 117 \times 107 \times 95}} = \frac{261}{3309.7}$$

$$= .08$$

$$df = 1$$

$$N = 142$$

$$\phi^2 = .006$$

$$\chi^2 = N \phi^2 = 142 \times .006 = .85$$

This value of  $\chi^2$  is not significant so our null hypothesis stands accepted.



TAB. 10-B

$H_0$  = For Engineering students, there is no relationship between the type of schooling they have had and any coaching taken by them.

	Type A schools	Type B School
Students with coaching	21	33
Students without Coaching	07	19

$$\phi = \frac{231 - 399}{\sqrt{54 \times 26 \times 28 \times 52}} = \frac{-168}{1429.76}$$

$$= -.1175$$

$$df = 1$$

$$N = 80$$

$$\phi^2 = .014$$

$$\chi^2 = N\phi^2 = 80 \times .014 = 1.12$$

This value of  $\chi^2$  is not significant so our null hypothesis is accepted.

TAB. 10-C

$H_0$  = For Medical college students there is no relationship between the type of schooling they have had and any coaching taken by them.

	Type A schools	Type B School
Students with coaching	23 B	32 A
Students without Coaching	06 D	08 C

$$\phi = \frac{192 - 184}{\sqrt{55 \times 14 \times 29 \times 40}} = \frac{8}{945.1}$$

$$= .0085$$

$$df = 1$$

$$N = 69$$

$$\phi^2 = .00007$$

$$\chi^2 = N \phi^2 = 69 \times .00007 = .005$$

This value of  $\chi^2$  is highly in significant so we accept our null hypothesis stated above.

TAB- 11

H<sub>0</sub> = The Coaching taken by a student has no relationship with whether he is a high achiever or not.

	Students with Coaching		Student with- out Coaching
high achievers (above 70% marks)	73	B	63 A
not high achievers (below 70% marks)	59	D	92 C

$$\phi = \frac{3717 - 6716}{\sqrt{136 \times 151 \times 132 \times 155}} = \frac{-2999}{20499.34} = -.15$$

$$\chi^2 = N\phi^2 = 287 \times .02 = 5.74$$

$$N = 287$$

$$df = 1$$

$$\phi^2 = .02$$

This value of  $\chi^2$  is significant at .05 and .02 levels but not at .01 level. The null hypothesis is rejected.

TAB. 11-A

H<sub>0</sub> = For I.M.A. students, any coaching taken by them has no relationship with whether they are high achievers or not.

	Students with Coaching		Student with - out Coaching
High achievers (above 70% marks)	12	B	45 A
not high achievers (below 70% marks)	11	D	72 C

$$\phi = \frac{495 - 864}{\sqrt{57 \times 83 \times 23 \times 117}} = \frac{-369}{3568.07} = -.103$$

$$\chi^2 = N \phi^2 = 140 \times .011 = 1.54$$

$$df = 1$$

$$N = 140$$

$$\phi^2 = .011$$

This value of  $\chi^2$  is not significant so we accept the hypothesis stated above.

TAB. 11-B

$H_0$  = For Engineering and Medical Students, any coaching taken by them has no relationship with whether they are high achievers or not.

	Students with Coaching		Student with- out Coaching	
High achievers (above 70% marks)	61	B	18	A
Not high achievers (below 70% marks)	48	D	20	C

$$\phi = \frac{864 - 1220}{\sqrt{79 \times 68 \times 109 \times 38}} = \frac{-356}{4717.1} = -.075$$

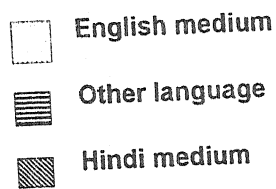
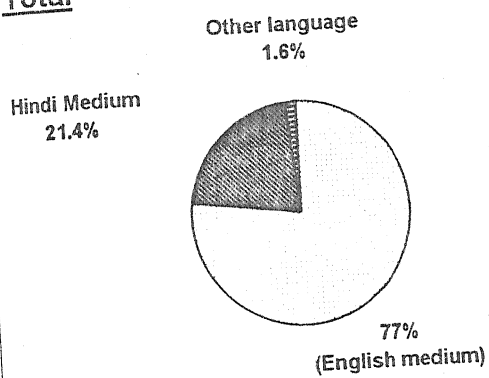
$$\chi^2 = N \phi^2 = 147 \times .0056 = .82$$

$$df = 1$$

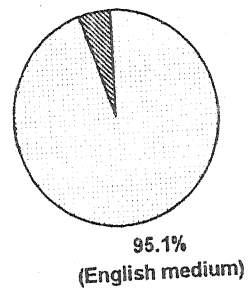
$$N = 147$$

$$\phi^2 = .0056$$

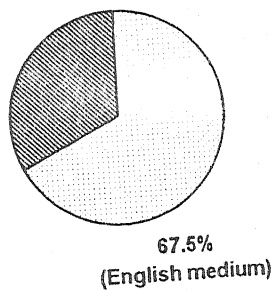
This value of  $\chi^2$  is not significant so our null hypothesis is accepted.

[1]Eng/ Hindi MediumTotalIMA

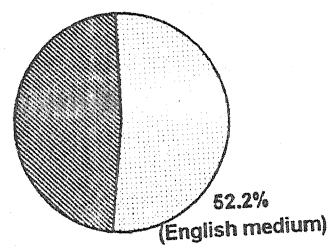
(Hindi + Other medium)  
4.9%

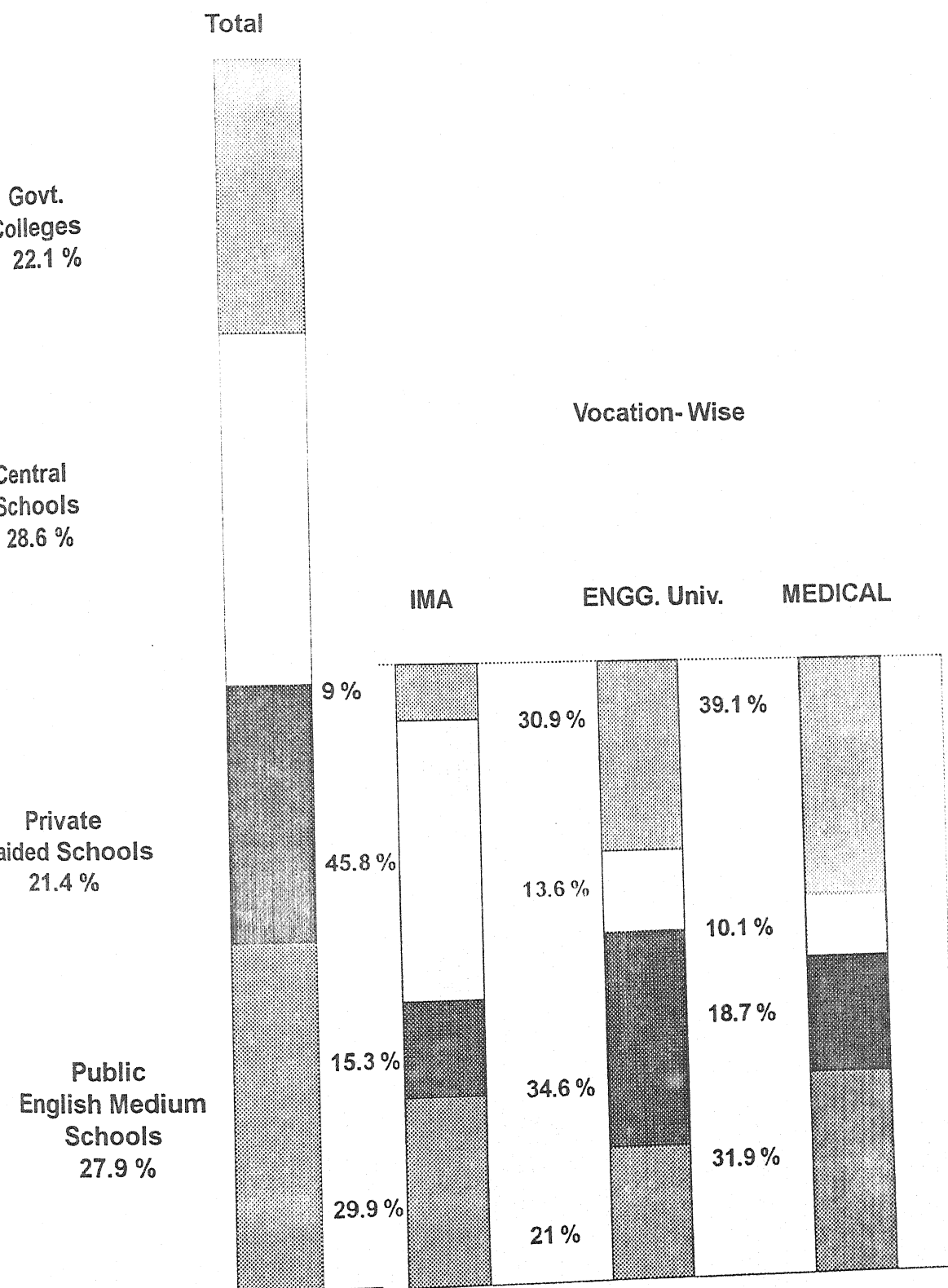
Engineering

(Hindi + Other medium)  
32.5%

Medical

(Hindi + Other medium)  
47.8%







[3] Schooling of general category students

Medical college students

A17	B6	C8	D18
-----	----	----	-----

General Cat. 49

Total 69

- A - Govt. Colleges
- B - Central Schools
- C - Pvt. Aided Schools
- D - English Medium / Public Schools

Engineering University Students

A19	B6	C19	D15
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General Cat. 59

Total 78

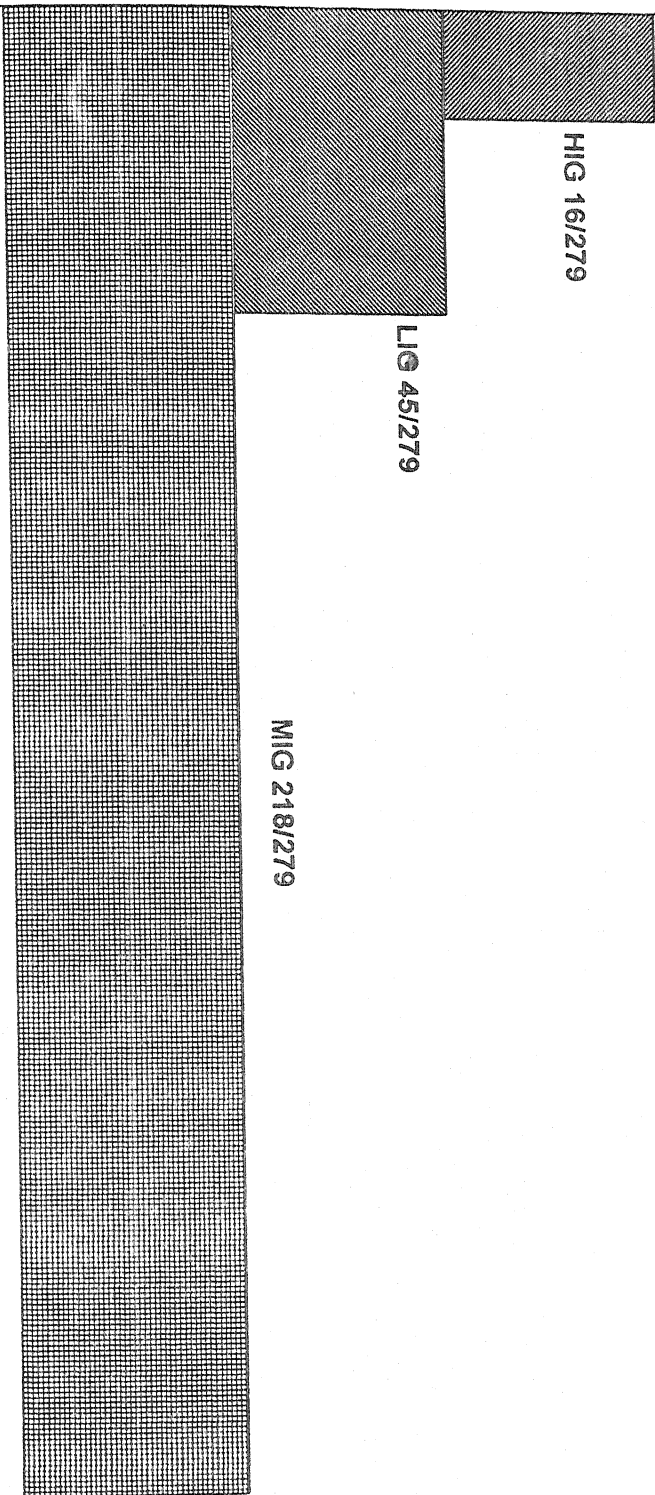
[4] Students belonging to different income groups

Total 279

HIG 16/279

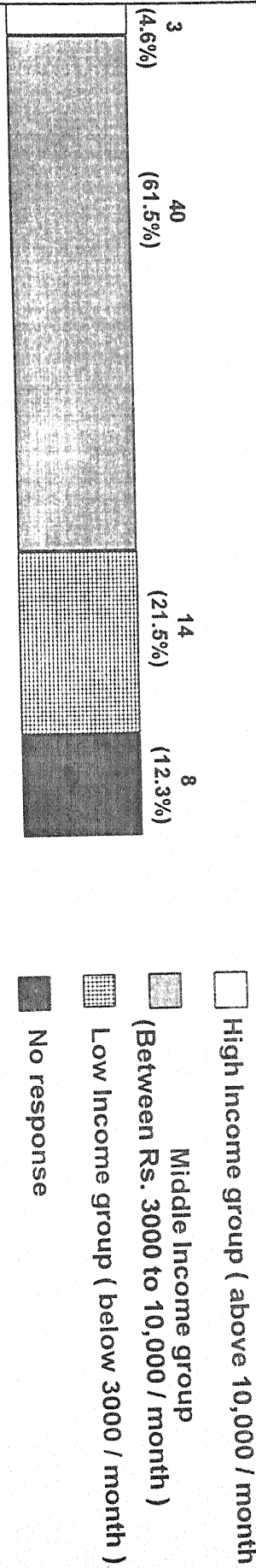
LIG 45/279

MIG 218/279

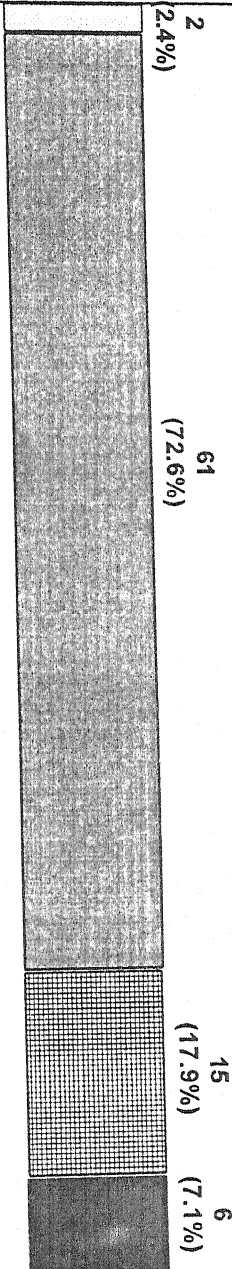


# [5] STUDENTS FROM DIFFERENT SCHOOLS, BELONGING TO DIFFERENT INCOME LEVELS

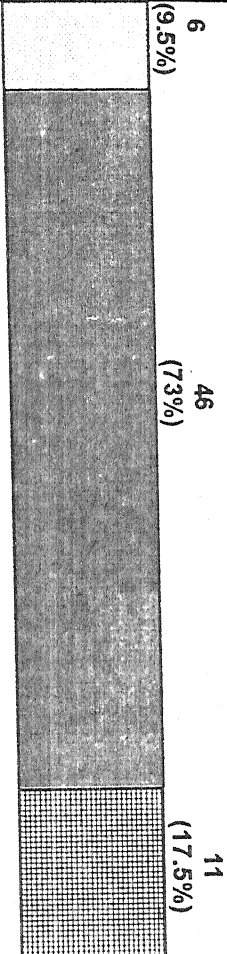
Govt.  
Colleges  
N=65



Central  
Schools  
N=84

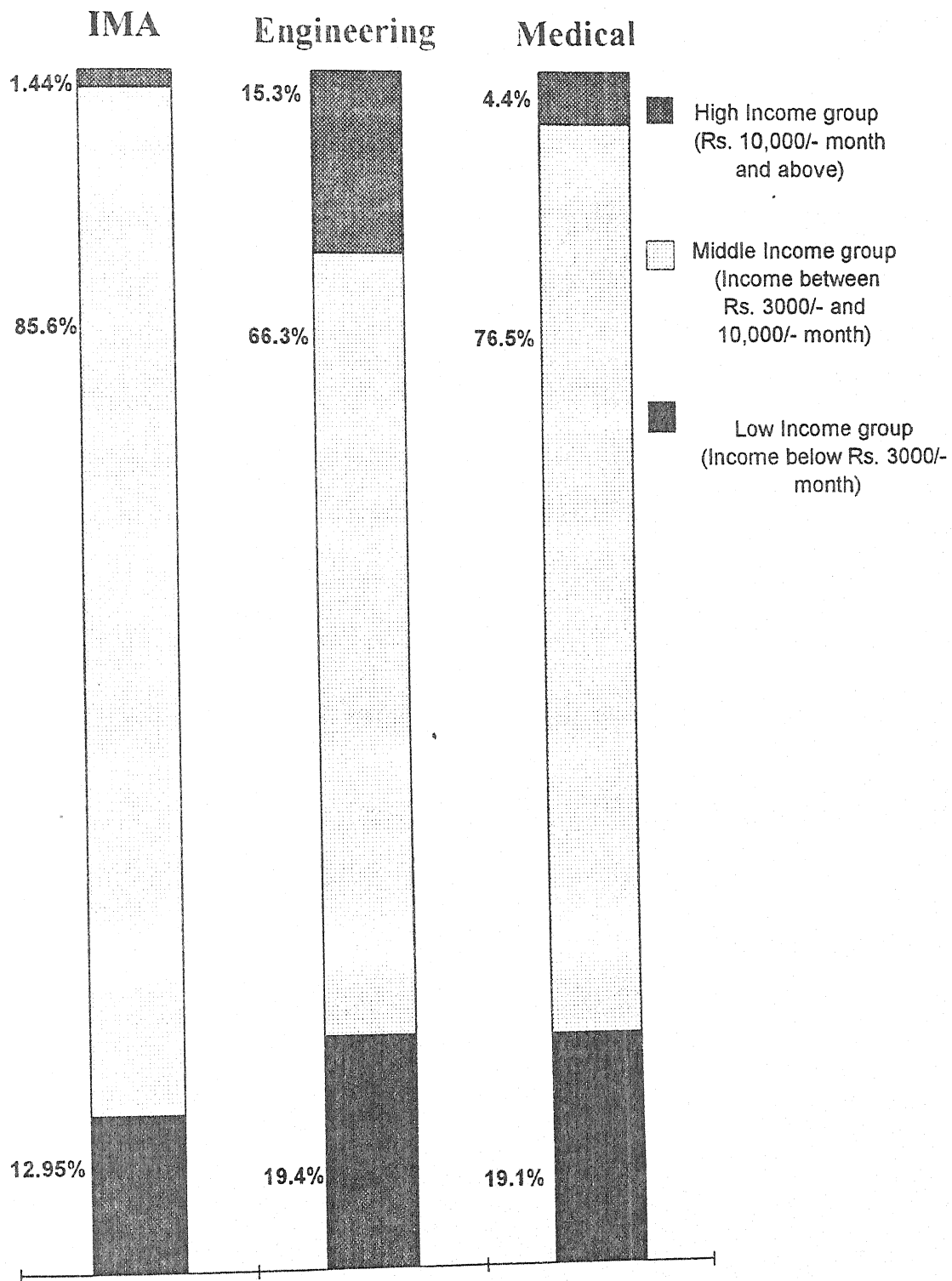


Private  
aided Schools  
N=63



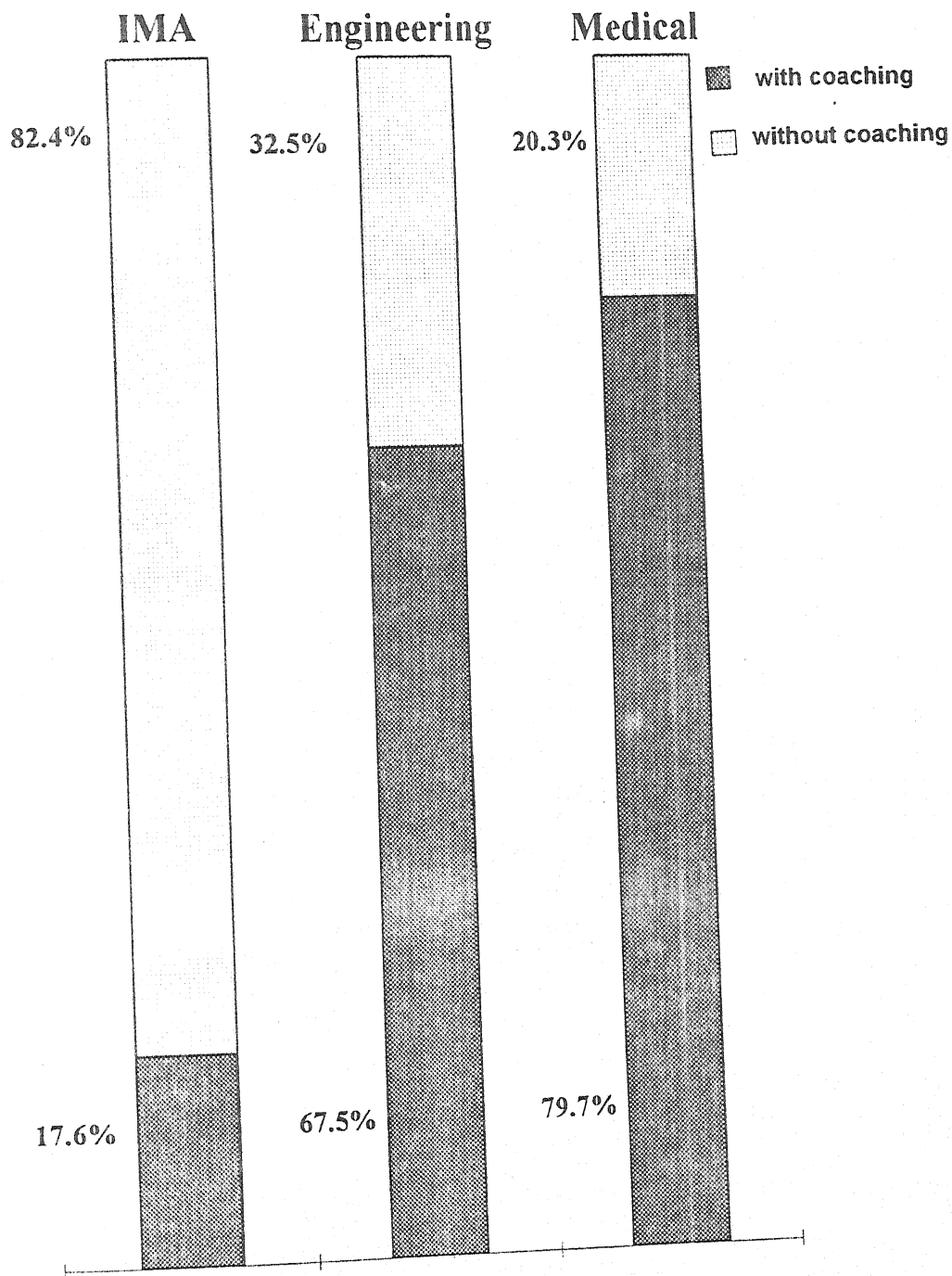
Public  
English Medium  
Schools  
N=82



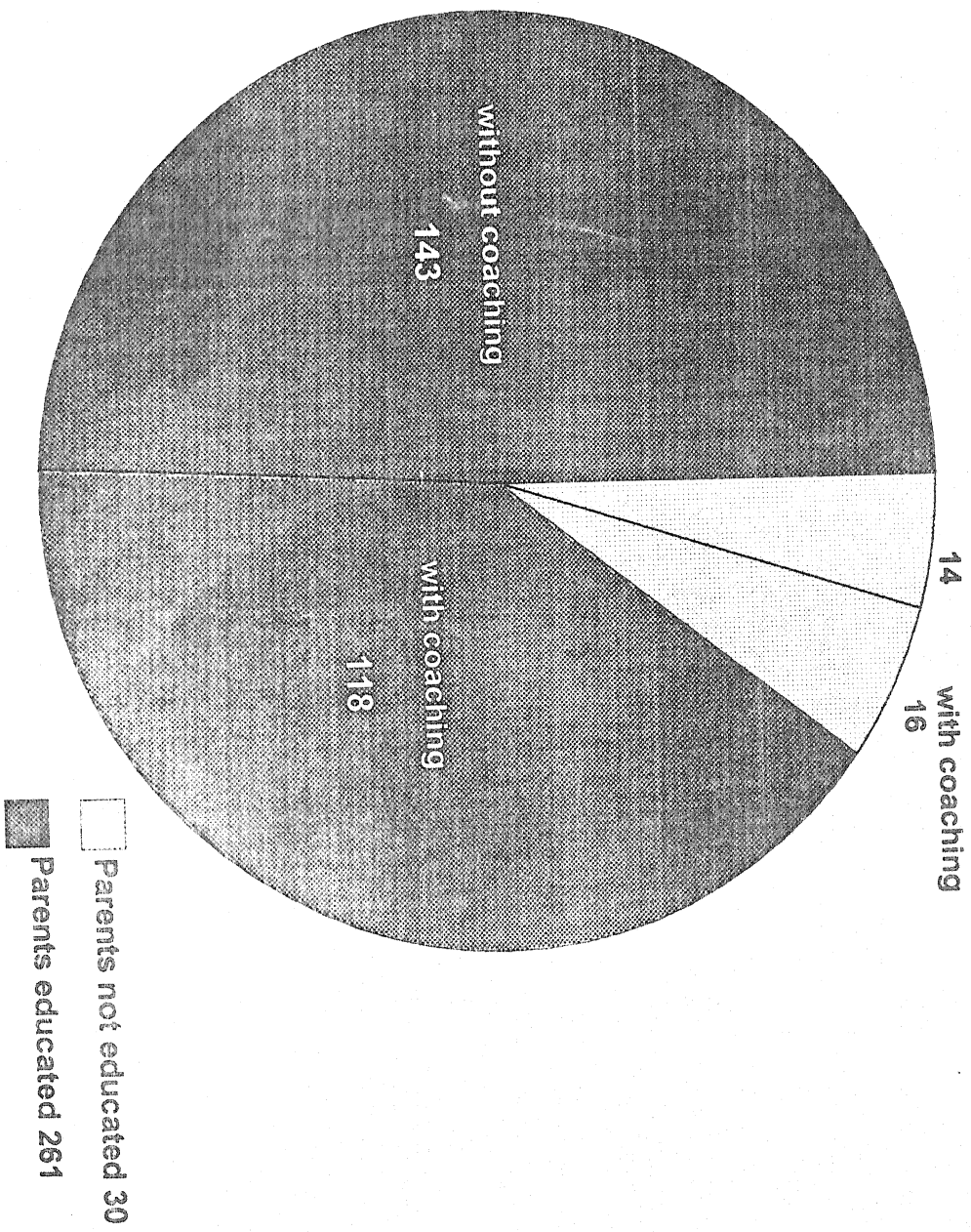
[6] Vocation - Income (%ges)



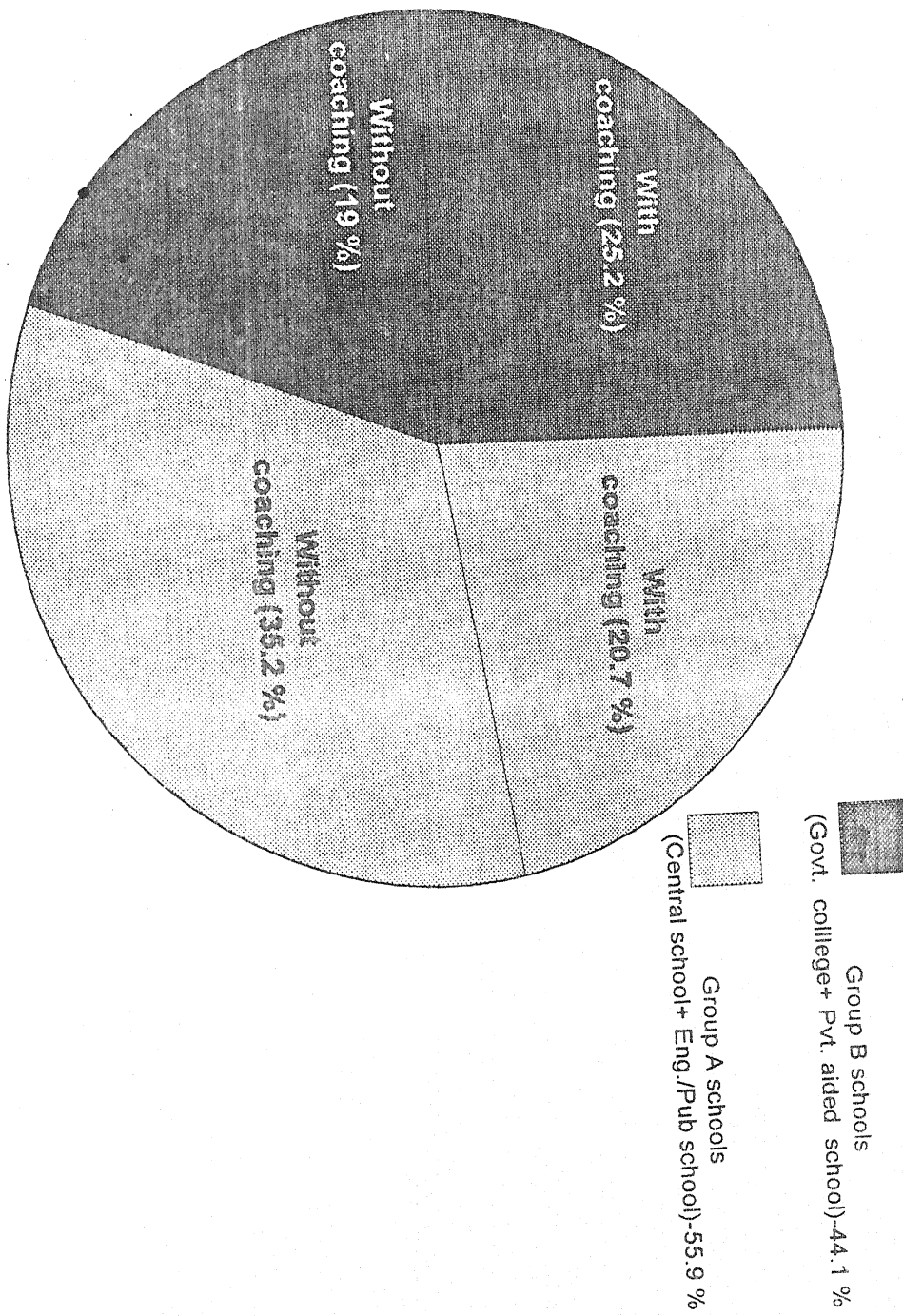
[7] With coaching/without coaching within each vocation



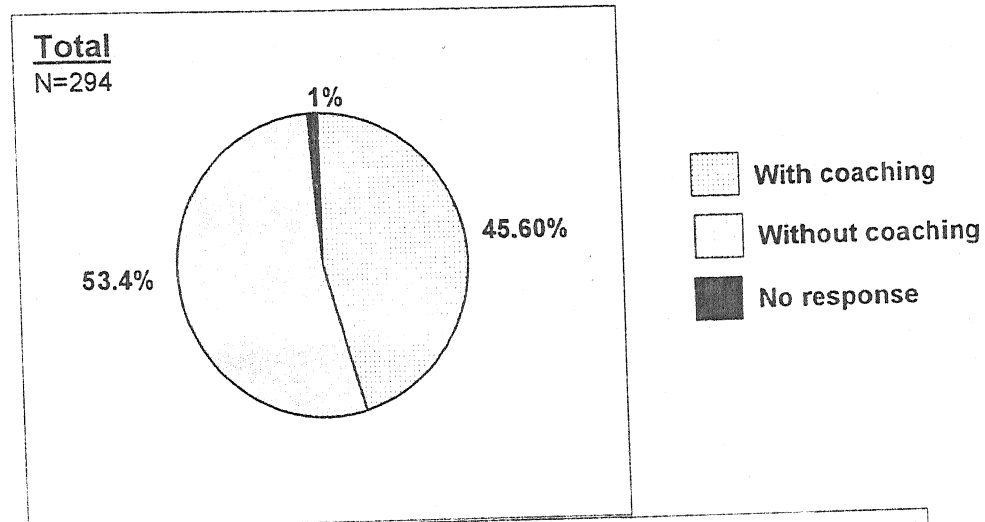
[8] Relationship between parents' education and extra coaching taken by students



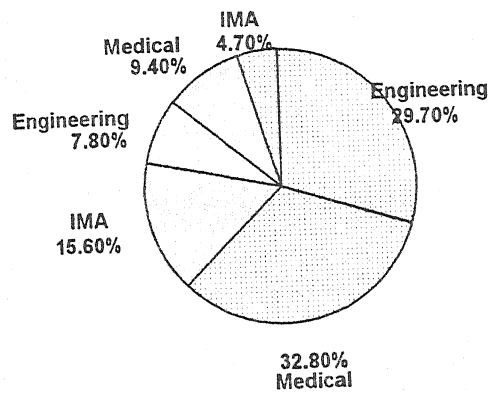
[9] Students with or without coaching within Gp. A and Gp. B schools



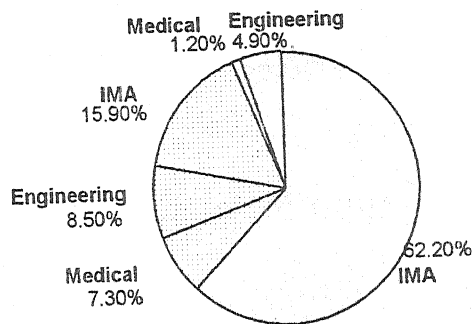




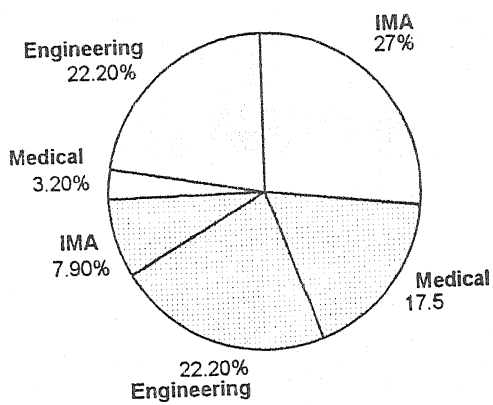
**Govt. Colleges**



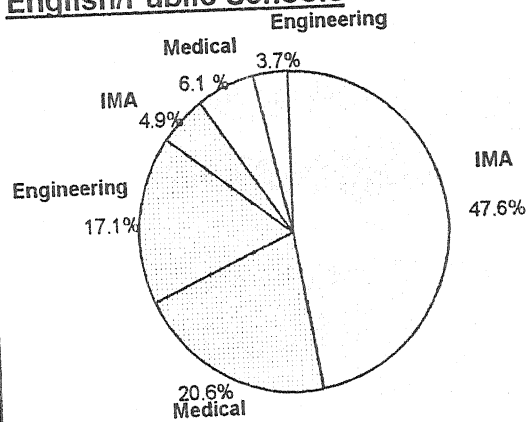
**Central Schools**



**Private aided Schools**

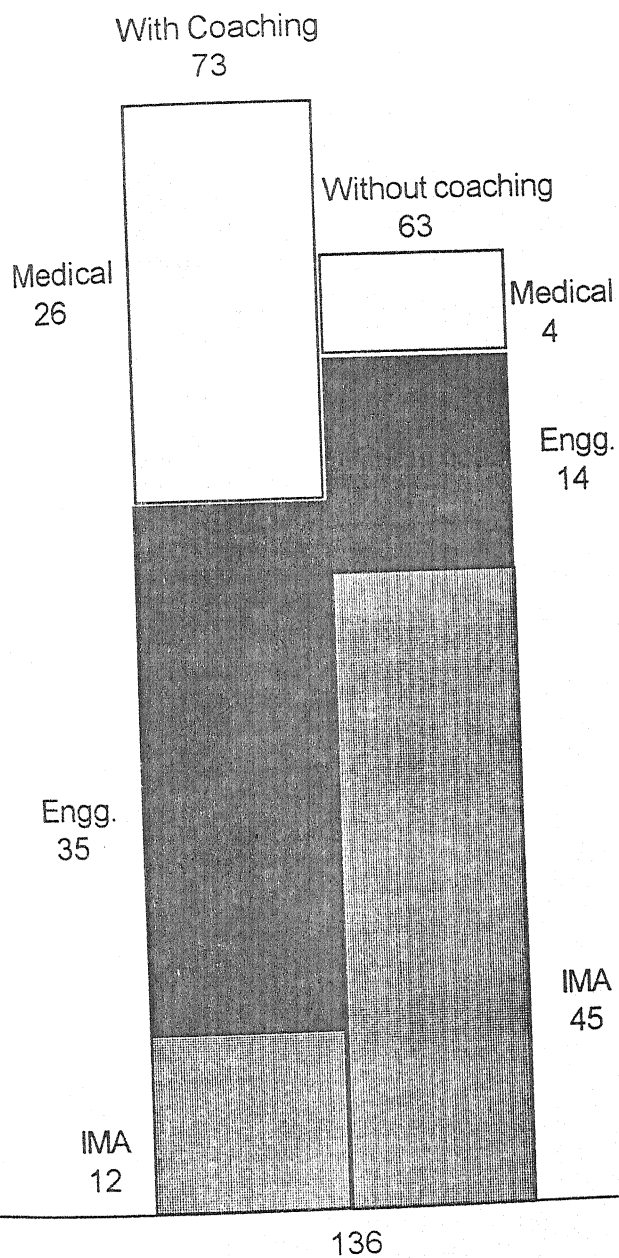


**English/Public Schools**

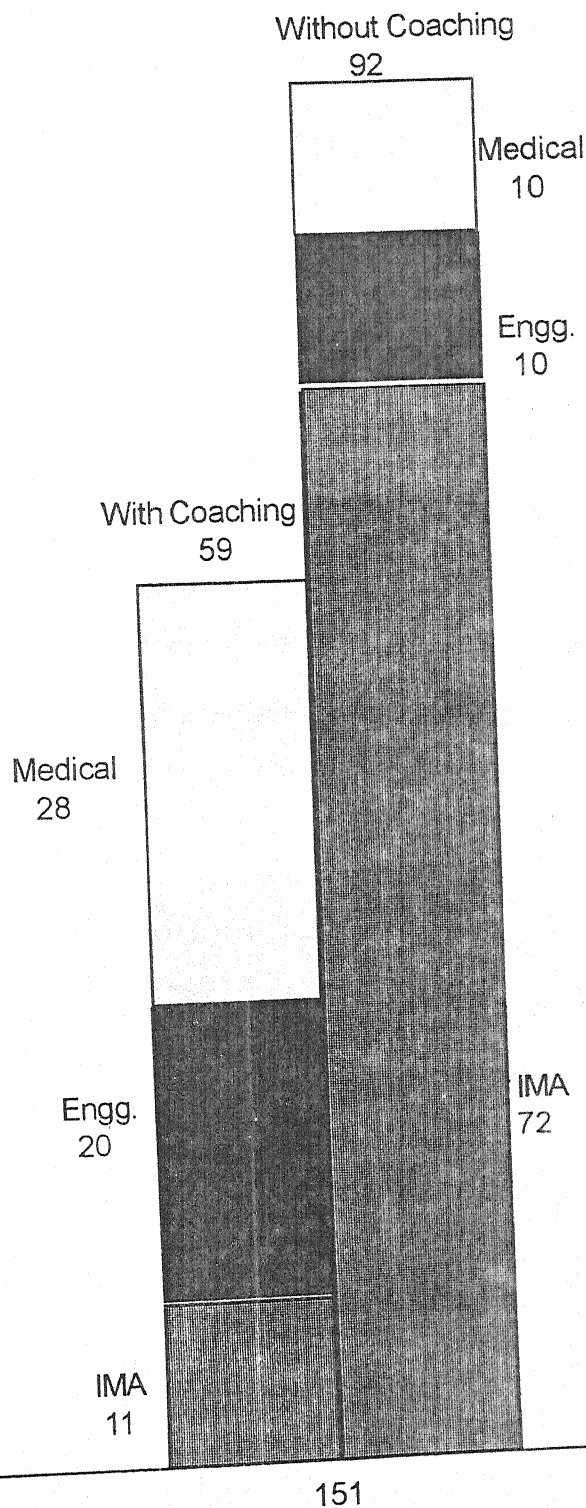


[11] With Coaching or without Coaching among high achievers or not high achievers.

### HIGH ACHIEVERS



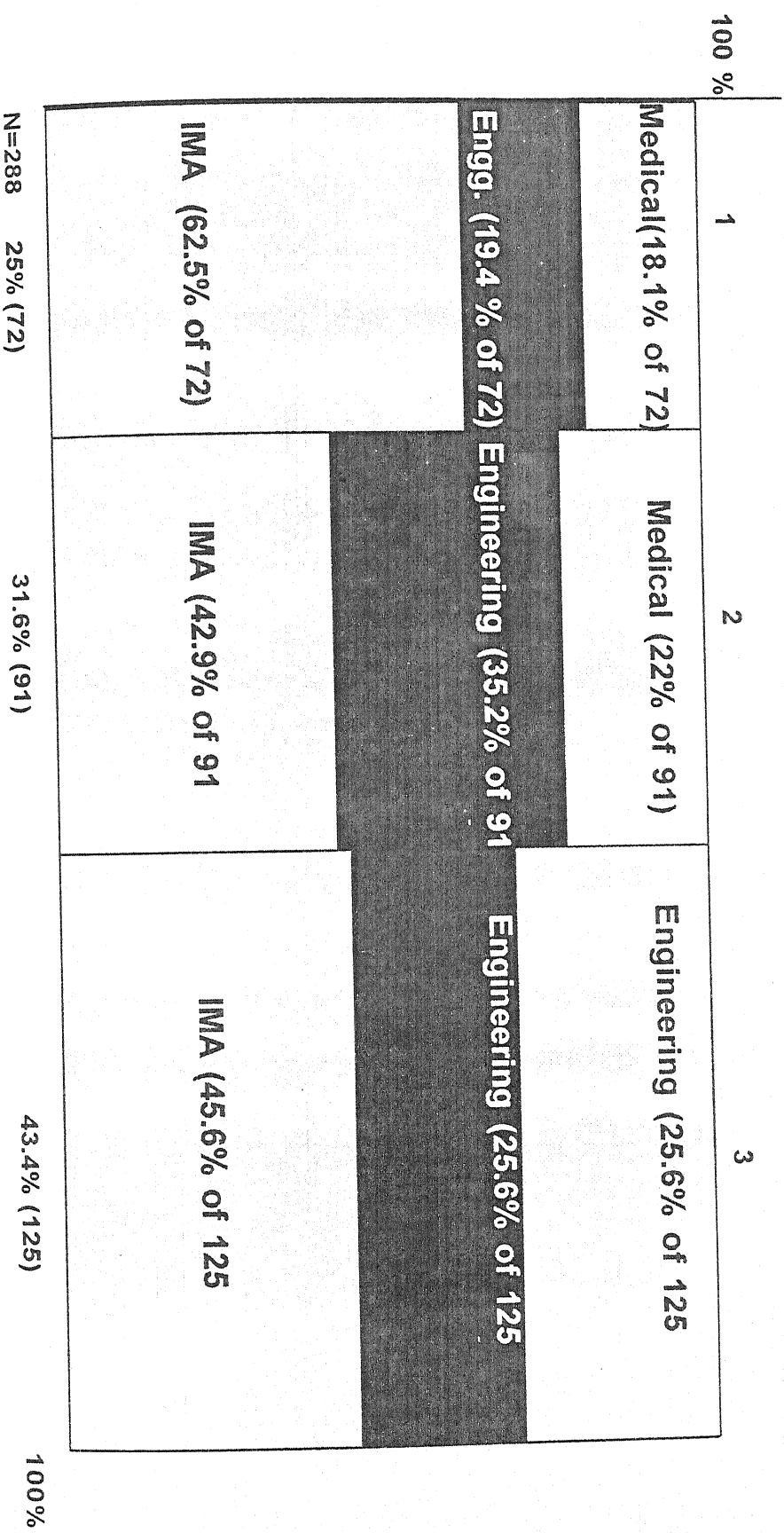
### NOT HIGH ACHIEVERS



**[12] Reason for joining the chosen vocation.**

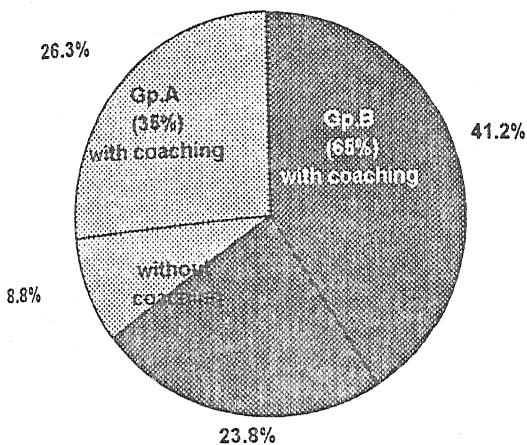
116

Reason no.1- Chose this vocation because his/her father or mother or some other family member was in it (25 % of 288).  
 Reason no. 2- Chose this vocation just because the opportunity presented itself (31.6% of 288).  
 Reason no. 3- Chose this vocation due to some reason other than 1 and 2 (43.4% of 288 )



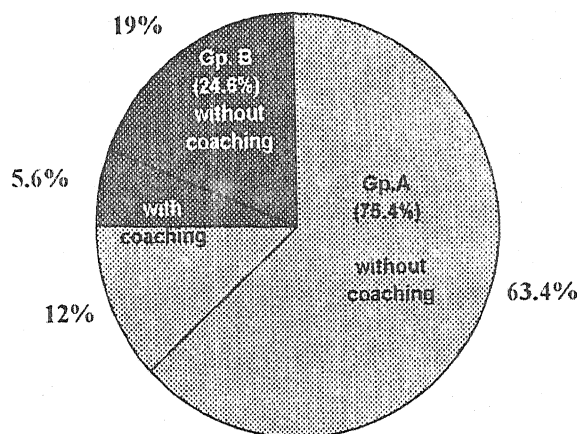
### Engineering University

10



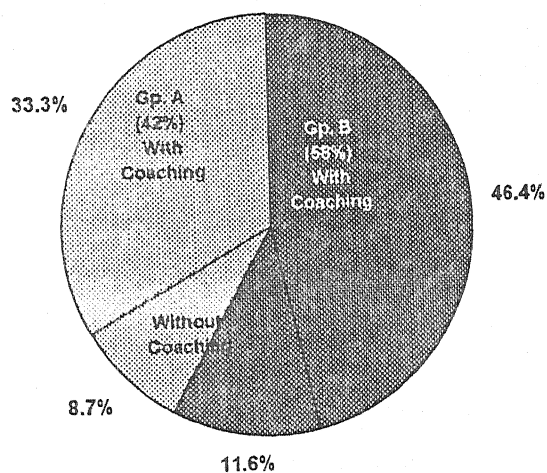
### IMA



N=142



### Medical College

N=69



 Gp. A schools  
 Gp. B schools



FINDINGS AND SUGGESTIONS

After subjecting the collected data to detailed analysis and, studying them from every angle, apart from subjecting them to various statistical treatments, we reach certain conclusions. We will discuss them one by one.

A- CONCLUSIONS AND IMPLICATIONS:

(1) The first and foremost concern of this study has been to find out the contribution made to the three vocations under study, by different types of schools.

While analysing the data, all the four types of schools were placed in two groups, group A containing central schools and Public/English medium schools and group B having Govt. Colleges and Private aided schools.

Our study reveals that the maximum contribution to these vocations has been from Group A schools, justifying the eagerness of parents to put their children in these schools. But another very important fact emerges and that is, that the facilities and experiences provided to students at central schools, it seems, are sufficient and any 'extra' experiences, which are provided by many public schools, are not really essential even for all-round development of personality. The essential facilities / experiences provided by these schools are -

- (a) Teacher-pupil ratio should be proper (below 1:50)
- (b) Teachers should be well qualified.
- (c) Provision of proper laboratory and library
- (d) Provision of adequate furniture and airy rooms.
- (e) Provision of games/sports facilities.
- (f) Provision of co-curricular activities like debates, dramas, elocution, N.C.C./Scouting etc.

(2) The second major concern of this study was to find out whether English medium education has any influence on a student's prospects of getting selected or not, and we find that English medium education is indeed more helpful compared to Hindi-medium or any other language education.

So, it seems that the demand for English medium schools and all - out efforts made by parents to ensure a seat for their wards in such schools, are not without justification.

We have already discussed the possible reasons responsible for this situation but the fact remains that our Govt. should try to reduce our country's dependence on English and make Hindi medium education equally popular. For this, the first step will be to arrange for high quality technical education, required for such vocations as Medical and Engineering in Hindi. This, as we are all aware, is not an easy task. Since Independence only, our Govt. has been professing the aim of replacing English with Hindi in every sphere of life, but as far as education is concerned, we see that our dependence on English has only increased. This language has become indispensable as far as advanced /

technological studies are concerned, bringing Lord 120  
Macaulay's prophecy true that English will open the door to  
all modern knowledge for India.

Though India has benefitted from this language but  
still it is a shame if a child fails to qualify for a  
particular vocation on account of not being proficient in  
English. The criterion should be knowledge and not the  
language. So we must start imparting higher education in  
Hindi and, before that, quality education in all the schools  
also, in Hindi.

This study is by no means against English language,  
but it is a well-known fact that a child learns better and  
faster in his mother-tongue only and 'proper learning'  
should be our aim, first and foremost. It is the  
requirement of English in higher and technical education  
which forces people to study in English medium schools so,  
for the present, predominance of English-medium education,  
it seems, will continue.

Apart from the above mentioned two facts, there are  
many other factors also which help the students in their  
selection to vocational courses.

(3) One such factor is effect of the social strata  
one belongs to, revealed in his income-group. We wanted to  
find out if students belonging to any particular income -  
group had better chances of selection compared to other  
groups or not.



Our study reveals that the middle -income strata of the society helps the students in their selection. We have already discussed the possible reasons. The motivation and desire to reach higher standards of living are the maximum in the middle-income group.

Now, it is not possible for educationists to increase the income-level of lower-income groups but something can be done to increase the motivation level and ambition in lower income groups also and for this, our Govt. along with the educationists, will have to strive hard to implement the adult education programmes in real earnest, and also provide greater facilities to people engaged in some jobs and housewives etc. for continuing education and correspondence courses, to enhance their educational qualifications as it has been seen that the biggest factor that works in favour of students from middle income stratum is that their parents are educated and they understand the importance of high and good education along with hard work and so they help their children in every possible way, thus facilitating their selection.

If all the people in the country understand the importance of education, their aspiration-level will automatically be raised, thus providing motivation to their children.

Another stumbling block, of finances, which stands in the way of lower-income groups, and dampens their enthusiasm

to forge ahead in life, can be countered by providing more facilities and cheaper education to poorer students.

Apart from all this, proper counselling can go a long way in dispelling any fears or hesitation in the minds of poorer students, which stops them from aspiring too high. Their self-confidence needs building up, but for this we should, first of all, have some method of finding the talent and aptitude of students, and then we should go all-out to help such students.

Very concerted effort, on All-India level, is required for this purpose.

(4) Another important factor, whose effect on a student's selection to a vocational course we wanted to study was education of his parents (till graduation).

Our study reveals that the education of parents is indeed a contributing factor in a student's selection.

Highly educated parents set higher and tougher goals in front of their children also and give their children all the facilities including proper study atmosphere at home and their own help. They know how much hard work is required to prepare for selection exams, something which students themselves are not experienced enough to realise, and like wise they encourage, motivate and help their children.

The rationale behind considering only graduate parents as educated in this study is that we want to see the

effect of parent's education on grown-up students, who have atleast passed their 12th class exam. Less educated parents might not be able to understand their children's situation that clearly and, also, they will not be able to help their children in senior classes.

It means that we have to encourage the parents also to increase their academic qualifications, and for this, again, there is a need to popularise distance education programmes. The help of radio and T.V. can be taken for this purpose. More universities like IGNOU should be opened to provide more continuing education programmes, but care should be taken that these programmes are implemented in all seriousness so that such education does not become worth-less. We have seen the case of B.Ed. courses through correspondence. These courses had become so easy that they lost their value and so the Govt. had to discontinue this practice. The aim should be to gain proper knowledge also, apart from getting the degree. Unless a person works hard to get something, he/she does not understand its true worth. So, we should popularise and make easily and cheaply accessible the non-formal higher education so that more and more people can be motivated to increase their qualifications, but this education should be imparted in all seriousness so that the students do not make light of it.

(5) One more factor whose effect we wanted to study was, whether students taught at home by their parents themselves have a better chance of selection compared to

those taught by someone else or no-body.

Our study reveals that it makes no difference whether a child is taught at home by his parents or a tutor or some one else as long as there is somebody helping him/her with his/her studies at home. Children should not be left on their own.

This factor again brings to light the need to raise the education - level of less educated parents as, though our study says that any body can teach the children at home but we all know that a child's parents are the most easily available, most approachable for the child, and the most interested party in their child's study.

Not only the adult education programmes but the formal school-level and college education also needs to be spread among the masses, so that we secure our future and this problem does not arise for our future generations. But this aspect requires more study.

(5) Coaching is another factor whose effect we want to study. But there are many angles from which the effect of coaching can be studied.

We see a mushrooming of various types of coaching centres, providing coaching for various selection- exams, and they all seem to be doing a good business. Our concern is to find-out whether 'Coaching' helps a student in getting selected to a vocational course or good schooling alone is

sufficient.

Our study reveals that lesser number of students from type A schools (i.e. Central Schools + Public/English Medium Schools) require coaching, showing us that schooling does matter.

It further reveals a few more things which are as follows:-

- (a) Coaching is not helpful for selection to I.M.A. but it is helpful for selection to other vocations telling us that where ever 'total personality' of a student is to be judged, it is 'good schooling' and various experiences provided therein which come in handy and not any short-term coaching; but when ever only the academic excellence is judged, coaching helps the students irrespective of their schooling.
- (b) Educational status of parents (i.e. whether any of the parents is a graduate or not) makes no difference on whether a student has to take coaching or not. We see that coaching is equally important to the children of less educated and more educated parents.
- (c) It is also revealed that though schooling makes a difference and educated parents are also helpful but still coaching has become almost a must for entrance to certain vocations and, whether or not a student takes coaching depends more upon the vocation he wants to join, rather than any other factor including

whether he is a high achiever or not in studies. But more study is required in this area also.

We must learn from this study that, education provided in our schools should be of the standard that would reduce children's dependence on coaching as this is a drain on the pocket of parents as well as eats up a lot of time of students also. Secondly, in all the Vocations, more stress should be laid on judging the over-all personality of a child and not just his knowledge, as this phenomenon is hindering the all-round development of children. Due to it their parents also lay more stress on only their academic achievements, whereas in a progressive country, we require all-round healthy personalities.

(7) There is one more factor which may be helpful to students in selection, and that is their own interest and motivation which makes them focused and determined to achieve their cherished goal.

This study has brought to light the two major contributing factors in this regard, and these are-

- (a) The student's familiarity with the chosen vocation on account of his/her father, mother or any other family-member being in it.
- (b) The opportunity to join a particular vocation presenting itself.

It happens because in today's social situation in our country, students appear in many competitive exams at the

same time and they join whichever vocation they are selected for as the competition in every field is so severe that they feel they can not take the liberty of making choices. It is a case of being content with what one gets, instead of going after something which one is not sure of achieving.

Here once again we feel that there is a need to find the aptitude of students in various fields and then provide them all the help to join a profession of their choice.

Another implication can be to first ascertain the need of the country seeing the technological, industrial and social advancement and then divert this educated manpower towards the same field by providing more job opportunities there. Our planners can be of help here. In fact in today's circumstances, our education - planning should always be related to the national planning. Our manpower planning should not only be related to the labour-force but also to the mobilisation and utilisation of our highly educated technical work-force.

#### SUGGESTIONS FOR FURTHER RESEARCH

Our present study is by no means complete. It has revealed various areas where a lot more work is required to be done.

(1) One such area is to find whether the students who have somebody to help them with their studies at home have



an edge over the students who have only themselves to depend upon or not. Though our study has revealed that the former do have a better chance, but still, common sense tells us that this can not be the conclusive proof. May be very few children, having no body to teach them at home, have been selected because there are, indeed, fewer such children in our society also. May be our sample is only reflecting the total population. In that case it would follow that out of all the selected students, very few are those who had to do self-study not because such students are not able to cope-up with the studies on their own, but because such students, specially among those who appear in selection exams, are really very few in number and most of the students do have somebody helping them with studies at home.

This area requires looking-into in greater detail and the researcher will have to take a sample with a much wider base; all the students appearing in selection exams, for example; and not only the selected ones.

(2) Another area which requires further study, is the role 'Coaching' plays in a student's selection.

Our study has revealed that even after having a good schooling and educated parents, most of the students opt for coaching. This leads us to believe that coaching does make the students better equipped for selection but, could it not be that it is nothing of the sort and that student only take coaching because they want to ensure their success and hence

want to do everything possible towards that end.

In our country today, the situation is not very conducive as far as job opportunities are concerned so people want to leave no stone unturned to ensure that they get into a sufficiently good profession so that they can lead a respectful and reasonably comfortable life. One more phenomenon is visible in the society, and that is, that many teachers in schools and colleges do not take any interest in teaching their students in the class room, but they have opened coaching-centres where they do give proper and serious coaching but after charging a huge amount of money. This may also be a reason that students can not do without coaching.

It is the researcher's opinion that these aspects of the 'need for coaching' should be studied in greater detail.

(3) There is one more area which has not yielded very convincing results so more research is required, and that is, to study the relationship between coaching and academic excellence of the student himself, which is reflected in the percentage of marks obtained by him in the 12th class examination.

The present study has, of course, shown that fewer high achievers opt for coaching, but it has also come to light that to take coaching or not depends more upon the vocation one wants to join rather than anything else, as revealed by the inverse relationship of coaching and selection for

I.M.A.. Hence, it is felt that more study, of more professions, is required to ascertain whether it is the chosen vocation dictating terms here or the achievement - level of students themselves is the decisive factor regarding whether or not to take coaching.

*CHAPTER - VI*

*SUMMARY*

CHAPTER - VISUMMARY

Education is very essential for human beings as it is a means by which a person is able to develop properly. In its broad sense, education continues from cradle to the grave, but actually the meaning of the word education is dependent upon the social situations prevalent at the time. Since vedic time to the present times this word has stood for different meanings and there have been different expectations too, depending upon the social demands.

Likewise in today's social milieu, the demands made on education are very complex. As our cherished goal, we expect it to fulfill the goal prescribed to education by Mahatma Gandhi, that it should be able to draw out all the potentialities and inner characteristics of a person so that he is able to realize his self, and alongside, we also expect it to ensure a person's economic security.

All the jobs available in today's society, require a certain minimum qualification. Today's schools are expected to fulfill this requirement and make the students well equipped to face the challenges of life, first and foremost of which is to earn a livelihood.

Today's schools are competing with each other claiming that they provide better education and better experiences to children, ensuring their all-round development, and parents

are competing with each other to secure a seat for their children in these, so called 'good schools' in the hope that this might help their children in landing good jobs, giving them prestige and money, both. This competition has resulted in many undesirable practices like, the selective admission policy of schools which has an inherent bias towards high achievers where as each individual should have equal opportunity without any discrimination on any grounds. Donations are also something which make good schooling totally biased towards the rich, and the bias towards English language is all too evident in our society, putting English medium educated students at an advantage, irrespective of other aspects of education, again resulting in a mad-rush for English medium schools.

The underlying purpose is only one that one may be able to enter a prestigious vocation. So, by this study, we will try to find out whether really all this clamouring for a specific type of schooling, in a specific language, is really justified or there are other influences helping a child enter a prestigious vocation.

#### TOOLS USED:

- (1) A questionnaire prepared by the researcher herself, to be filled in by students.
- (2) Interview conducted of a few students by the researcher herself.

**METHOD:**

Seeing the requirement of the study, the Normative survey Method was employed.

**SAMPLE:**

The sample consisted of a total of 294 candidates; all first- term candidates belonging to the three vocations under study; 144 were from I.M.A., 81 from the Engineering University Roorkee and 69 from the Medical College Jhansi. All the institutions selected were such which could give a fair representation of the whole country as these attract students from all over India.

All the first term students were taken into the study though many in the Engineering University and a few in the Medical College did not respond despite many reminders. The response from I.M.A. Dehradun though was hundred percent.

**FINDINGS:**

(1) Our study has revealed that the maximum contribution to the three chosen vocations has been from group 'A' schools (i.e. central schools + Public/English medium schools), Justifying the eagerness of parents to put their children in these schools. But another very important fact emerges and that is, that the facilities and experiences provided to student at central schools, it seems are sufficient and any 'extra' experiences, which are provided by many public schools are not really essential, not even for alround development of personality.



(ii) We have found from this study that English medium education is certainly more helpful to students compared to Hindi medium or any other language education, so it seems that the demand for English medium schools and, allout efforts made by parents to ensure a seat for their wards in such schools, are not without justification.

(iii) This study has also revealed that the maximum number of students that are joining these vocations are from middle - income group families (i.e. with income between Rs. 3000 and 10,000 per month). It means that the middle-income group encourages and helps its children the maximum to work hard and study well and they have the maximum motivation to join these vocations so we require to raise the aspiration - level of the lower-income group also along with providing them with all the facilities to study and do well. For this, the standard of education in all the government schools, where free education is given, should be raised, including proper stress on co-curricular activities.

(iv) Another fact that has emerged is that high education of parents, taken as graduation-level education here, does contribute towards a student's chances of selection to a prestigious vocation. We can say that highly educated parents expect the same from their children also; their aspiration-level is high and they are very status-conscious also so they are able to guide, motivate and help their children to select the proper vocation. We should, therefore, encourage the parents also to increase their

education. For this more open universities like I.G.N.O.U. will be very helpful and the means of mass-communication, like Radio and T.V. should also be somehow roped in this whole programme.

(v) Though, as revealed above, the educational status of parents does influence a student's chances of selection in a prestigious vocation, this study shows that whether the students are taught at home by their parents only or somebody else, makes no difference. The thing that makes a difference is that the students should be helped with their studies by someone, and not left on their own.

This fact also tells us that students with educated parents are at an advantage because parents are easily available to help their children and money spent on private tutors can also be saved.

Educating all the parents till graduation-level may be very difficult task at present but if we start paying better attention to the education of our present generation, the next generation will definitely reap its benefits.

(vi) Our next finding has been about the role of coaching in students' selection. We have studied this aspect from many angles and found that -

(a) Lesser number of students from type A schools (i.e. central schools + public/English medium schools) require coaching, telling us that the type of school a

child studies in, does make a difference.

- (b) Coaching is helpful to all types of students where ever only academic excellence is required but when all-round personality is to be judged for selection, like in case of I.M.A., coaching does not help much.
- (c) Coaching makes a significant contribution to the selection of students even when their parents are well educated and they have had a good schooling.
- (d) Whether a student has to take coaching or not is determined by the vocation he wants to join rather than any other factor.

(vii) The next finding of this study is regarding the role of self-interest and motivation of the student himself in his selection to a particular vocation.

It is revealed that the two major contributing factors in this regard are -

- (a) The student's familiarity with the chosen vocation on account of his/her father, mother or any other family member being in it.
- (b) The opportunity to join a particular vocation presenting it self. Many times the choice of student does not matter much as students, as we all know, try to gain entrance to many vocations simultaneously and then, are content to join which ever vocation they are selected in, as jobs are scarce in our society. We can

help the students by providing proper education facilities in schools and conducive atmosphere at home, by upgrading our existing schools so that good academic curriculum as well as co-curricular activities can be provided to them.

The country should think in terms of extending the education facilities, on easier and more efficient terms to our adults and working population and by providing proper and plentiful job opportunities so that the students and the nation, both are benefitted.

For the present, we see that, English medium schools do hold sway, as shown by our study, but, in future, it should be our endeavour to provide quality education in all the schools.

#### SUGGESTIONS FOR FUTHER RESEARCH:

Various areas related to the present study require more research. There areas are -

- 1- Whether students having somebody at home to help them with their studies do really have an edge over those who have to do self-study or there are fewer self-study students selected to prestigious vacations only because there are fewer such students in the society also.
- 2- Whether coaching really plays a significant role in the selection of students to prestigious vocations or is it just that students opt for coaching prior to

their competitive exams just to not let any stone unturned, or out of compulsion in such cases where the teachers do not teach properly in class-rooms but do give proper coaching in their coaching-centres leaving the students without any option but to join them if they want to study properly.

- 3- The role played by a student's own academic excellence in his selection to prestigious vocations. Our study has revealed that fewer high achievers opt for coaching, but our study has also revealed that whether or not a student takes coaching is decided by the vocation he is trying-for rather than any other factor, so this area requires more research.

TS

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# *APPENDIX*

## TOPIC OF RESEARCH

A STUDY TO FINDOUT THE CONTRIBUTION OF DIFFERENT  
TYPES OF SCHOOLS TOWARDS VARIOUS VOCATIONAL COURSES  
IN INDIA WITH SPECIAL REFERENCE TO ENGINEERING, ARMY AND  
MEDICAL PROFESSION

- ```

Q1. Your full name .....
Q2. Age .....
Q3. Male or Female .....
Q4. Married or unmarried .....
Q5. Educational Qualification .....
Q5A. Branch of Engineering .....
Q6. Name of the school where      a. School .....
    educated                      b. Village/city.....
                                c. State .....
Q7. Percentage of marks obtained .....
    by you in the selection exam
    for the present vocation.
Q8. Percentage of marks obtained .....
    by you in the 12th std.
Q9. The monthly income of your .....
    father/guradian at the time
    of your selection.

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**TICK MARK THE CORRECT ANSWER IN THE FOLLOWING:-**

- Q10. Your school belonged to which of the following categories:-
- (a) Govt College.
  - (b) Central Schools
  - (c) Private aided schools.
  - (d) Public Schools.
- Q11. Which of the following characteristics were present in your school :-
- (a) Well stocked library.
  - (b) Well equipped laboratories.
  - (c) Big play grounds.
  - (d) Sufficient facilities for games/sports.
  - (e) Well qualified teachers.

- (f) Use of audio-visual aids in teaching.
- (g) Big airy class-rooms.
- (h) Adequate and comfortable furniture.
- (i) A lot of co-curricular activities.
- (j) Parent teacher association.
- (k) Medium of instruction was:
  - (i) English
  - (ii) Hindi
  - (iii) Some other language

(l) Teacher pupil ratio (i.e. No. of students per teacher) was approximately :-

- (i) Between 0 - 35
- (ii) Between 35 - 50
- (iii) Above 50

(m) Were other school activities held, like the following :-

- (i) NCC/Scouting etc.
- (ii) School Excursion/tours
- (iii) Social Service Projects
- (iv) Swimming
- (v) Riding
- (vi) Services of Counsellor
- (vii) Doctor
- (viii) Midday meals/snacks.

Q12. At home you were taught by :-

- (a) Your parents.
- (b) Any other family member.
- (c) Private tutor.

Q13. If we consider only a graduate as educated, which of the following falls true in your case:

- (a) Both your parents were educated.
- (b) Only your father was educated.
- (c) Only your mother was educated.

Q14. Working members :

- (a) Both your parents were working.
- (b) Only your father was working.
- (c) Only your mother was working.
- (d) You were looked after by a relation (grand parents/others).

Q15. Your father was :

- (a) In business.
- (b) In Govt. service.
- (c) In private service.
- (d) In armed forces.



- Q16. Did you join any other profession prior to your present vocation.  
(a) Yes. (b) No.
- Q17. Which of the following categories do you belong to :-  
(a) General.  
(b) Reserve (SC/ST or handicap)
- Q18. Were you selected for the present vocation in the first attempt.  
(a) Yes  
(b) No.
- Q19. Did you partake of any specific coaching before appearing in the selection exam :-  
(a) Yes (b) No
- Q20. (a) If the answer to Q 19 is yes, was it :-  
(i) Individual coaching  
(ii) Group Coaching  
(iii) Both  
(b) Mention the duration of coaching (approx)  
\_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_ days.
- Q21. Did you appear in the selection exam :-  
(a) After marriage or  
(b) before marriage.
- Q22. You chose to join the present vocation because :-  
(a) Your father/mother was in this vocation.  
(b) Some other family member was doing well in the vocation.  
(c) Just because the opportunity arose.  
(d) Some other reason.
- Q23. After completing your present vocational training, would you:-  
(a) Go back to your native place and work there.  
(b) Go where ever you are sent.  
(c) Go anywhere in the country where your career prospects are bright.  
(d) Go abroad.
- Q24. If your answer to Q 23 is 'd' (i.e. go abroad) which of the following is/are the reason/reasons:-  
(a) Most of your family members are abroad.  
(b) It is easier to get a job abroad.  
(c) One can earn much more money abroad.  
(d) Working abroad gives one a higher status in society.